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# SESSIONAL PAPERS.

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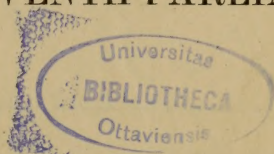
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VOLUME 10.

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SECOND SESSION OF THE SEVENTH PARLIAMENT

OF THE



DOMINION OF CANADA.

---

SESSION 1892.

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VOLUME XXV.

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OTTAWA

PRINTED BY S. E. DAWSON, PRINTER TO THE QUEEN'S MOST  
EXCELLENT MAJESTY

1892

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- 18.** Report of the Minister of Justice as to Penitentiaries in Canada for the year ended 30th June, 1891. Presented 23rd March, 1892, by Sir John Thompson.  
*Printed for both distribution and sessional papers.*
- 19.** Annual Report of the Department of Militia and Defence of Canada, 31st December, 1891. Presented 7th April, 1892, by Hon. M. Bowell.....*Printed for both distribution and sessional papers.*
- 20.** Statement of Governor General's Warrants issued since the closing of parliament and of the expenditure made on them, in accordance with the Consolidated Revenue and Audit Act. Presented 29th February, 1892, by Hon. G. E. Foster.....*Printed for distribution only.*
- 20a.** Return to an address of the House of Commons to his excellency the Governor General, dated 8th March, 1892, for copies of all reports of ministers of the crown upon which any Governor General's warrants have been issued during the recent recess of parliament, and of the orders in council authorizing such issue. Presented 7th April, 1892.—*Mr. Mulock.....Not printed.*
- 21.** Report of the Commissioner, Dominion Police, for the year 1891, under Revised Statutes of Canada, chapter 184, section 5. Presented 29th February, 1892, by Sir John Thompson.....*Not printed.*

## VOLUME 12—Continued.

- 22.** Statement of expenditure under vote for miscellaneous unforeseen expenses, from July, 1891, to date. Presented 1st March, 1892, by Hon. G. E. Foster.....*Printed for distribution only.*
- 23.** Statement in reference to fishing bounty payments for 1890-91, required by chapter 96 of the Revised Statutes of Canada. Presented 1st March, by Hon. C. H. Tupper.....*Printed for sessional papers only.*
- 23a.** Return to an order of the House of Commons, dated 3rd August, 1891, for a return of the names of proprietors to whom licenses have been granted for salmon net fishing on the Restigouche River, in the county of Bonaventure, for 1890 and 1891. Presented 3rd March, 1892—*Mr. Fauvel.*  
*Not printed.*
- 23b.** Draft of proposed regulations for the lobster fishery. Presented 17th March, 1892, by Hon. C. H. Tupper.....*Printed for distribution only.*
- 23c.** Copies of papers relating to the mutual recognition by Canada and Newfoundland of licenses issued to United States fishing vessels, under the *modus vivendi*, and the division of the fees collected by the same. Presented 18th March, 1892, by Hon. C. H. Tupper.....*Printed for sessional papers only.*
- 23d.** Return to an order of the House of Commons, dated 14th March, 1892, for a return showing the quantity, value and kinds of fish, fish oil and fish products imported into Canada from Newfoundland, each year, for past five years; also amount of duty thereon which would have been paid if the duties levied upon similar imports from other countries had been levied. Presented 22nd March, 1892.—*Mr. White (Shelburne).*.....*Printed for sessional papers only.*
- 23e.** Further papers respecting the fisheries on the Atlantic coast, including the separate arrangement proposed to be entered into by Newfoundland with the United States, and also the enforcement by the government of Newfoundland against Canadian vessels of the Newfoundland Bait Act. Presented 30th March, 1892, by Hon. C. H. Tupper.....*Printed for sessional papers only.*
- 23f.** Additional papers respecting the fisheries on the Atlantic coast, including the separate arrangement proposed to be entered into by Newfoundland with the United States, and also the enforcement by the government of Newfoundland against Canadian vessels of the Newfoundland Bait Act. Presented 7th April, 1892, by Hon. C. H. Tupper.....*Printed for both distribution and sessional papers.*
- 23g.** Return to an order of the House of Commons, dated 6th April, 1892, for a copy of all correspondence between F. Charlebois, of Byng Inlet, North (Ontario), and the fisheries department concerning the payment of a claim for service performed by the said Charlebois for the said department. Presented 21st April, 1892—*Mr. Laurier.*.....*Not printed.*
- 23h.** Further papers respecting the enforcement against Canadian fishing vessels by the government of Newfoundland of the Newfoundland Act respecting the sale of bait to foreign fishing vessels. Presented 11th May, 1892, by Sir John Thompson.....*Printed for sessional papers only.*
- 23i.** Return to an order of the House of Commons, dated 14th March, 1892, for a return showing the number of Newfoundland vessels and men therein, and number of fixed fishing establishments owned by Newfoundlanders, with number of employees engaged last year in fishing, in whole or in part, within the waters adjacent to Canadian Labrador and Magdalen Islands. Presented 12th May, 1892.—*Mr. White (Shelburne).*.....*Printed for sessional papers only.*
- 23j.** Further papers respecting the enforcement by the Newfoundland authorities against Canadian fishing vessels of the Newfoundland Act respecting the sale of bait to foreign vessels. Presented 20th May, 1892, by Sir John Thompson.....*Printed for sessional papers only.*
- 24.** Return to an address of the House of Commons to his excellency the Governor General, dated 21st April, 1890, for copies of any and all communications that may have passed between the imperial and dominion governments with reference to the abrogation of such articles in the various treaties of commerce between her majesty's government and the government of foreign nations as preclude preferential fiscal treatment of goods of British and colonial production by the government of the dominion. Presented 7th March, 1892.—*Mr. Laurier.*  
*Printed for both distribution and sessional papers.*
- 24a.** Copy of a despatch from the right honourable the secretary of state for the colonies in reply to an address to her majesty praying that her majesty would take such steps as might be necessary to denounce and terminate the provisions contained in the most-favoured nation clauses of the treaties with the German zollverein and the kingdom of Belgium. Presented 22nd April, 1892, by Hon. G. E. Foster.....*Printed for sessional papers only.*



VOLUME 12—*Continued.*

- 25.** Return to an order of the House of Commons, dated 3rd March, 1892, showing the date of the Speaker's warrant, the date of the writ, and the date of the appointment of a returning officer, in the case of election of members to the House of Commons, since the close of last session; also a statement of the causes of delay in reference to any of these matters where delays have taken place. Presented 7th March, 1892.—*Mr. Mills (Bothwell)*..... *Not printed.*
- 25a.** Supplementary return to an order of the House of Commons, dated 3rd March, 1892, for a return showing the date of the Speaker's warrant, the date of the writ, and the date of the appointment of a returning officer, in the case of election of members to the House of Commons, since the close of last session; also a statement of the causes of delay in reference to any of these matters where delays have taken place. Presented 3rd June, 1892.—*Mr. Mills (Bothwell)*..... *Not printed.*
- 26.** Ten days' statement of the receipts and payments of Canada, from the 11th to the 20th February, and from the 21st to the 29th February, 1892, and the corresponding periods of 1891. Presented 7th March, 1892, by Hon. G. E. Foster..... *Not printed.*
- 26a.** Ten days' statement of the receipts and payments of Canada, from the 1st to the 10th March instant, and the corresponding period of 1891. Presented 15th March, 1892, by Hon. G. E. Foster.  
*Not printed.*
- 26b.** Ten days' statement of the receipts and payments of Canada, from the 11th to the 20th of March, instant, and the corresponding period of 1891. Presented 23rd March, 1892, by Hon. G. E. Foster.  
*Not printed.*
- 26c.** Ten days' statement of the receipts and payments of Canada, from the 11th to the 20th of April, instant, and the corresponding period of 1891. Presented 22nd April, 1892, by Hon. G. E. Foster.  
*Not printed.*
- 26d.** Ten days' statement of the receipts and payments of Canada, from the 21st to the 30th of April, ultimo, and the corresponding period of 1891. Presented 4th May, 1892, by Hon. G. E. Foster.  
*Not printed.*
- 26e.** Ten days' statement of the receipts and payments of Canada, from the 11th to the 20th May, instant, and the corresponding period of 1891. Presented 30th May, 1892, by Hon. G. E. Foster.  
*Not printed.*
- 26f.** Ten days' statement of the receipts and payments of Canada, from the 21st to the 31st May last, and the corresponding period of 1891. Presented 3rd June, 1892, by Sir John Thompson.—  
*Not printed.*
- 26g.** Ten days' statement of the receipts and payments of Canada, from the 1st to the 10th June, instant, and the corresponding period of 1891. Presented 27th June, 1892, by Hon. G. E. Foster.—  
*Not printed.*
- 26h.** Ten days' statement of the receipts and payments of Canada, from the 21st to 31st June last, and the corresponding period of 1891. Presented 9th July, 1892, by Hon. G. E. Foster. *Not printed.*
- 27.** Statement of all superannuations and retiring allowances in the civil service, giving the name and rank of each person superannuated or retired, his salary, age and length of service, his allowance and cause of retirement, whether vacancy has been filled by promotion or new appointment, etc., for year ended 31st December, 1891. Presented 7th March, 1892, by Hon. G. E. Foster.—  
*Printed for both distribution and sessional papers.*
- 28.** Statement of the affairs of the British Canadian Loan and Investment Company, as on the 31st December, 1891. Presented 9th July, 1892, by Hon. Mr. Speaker..... *Not printed.*
- 29.** Return to an address of the Senate to his excellency the Governor General, dated 4th August, 1891, for a statement in detail of the amount of money paid to A. F. Wood, Esq., for services, etc., as commissioner for canals and railways in different places in 1890. Presented 4th March, 1892.—*Hon. Mr. Flint*..... *Not printed.*
- 30.** Return to an address of the Senate to his excellency the Governor General, dated 5th June, 1891, for a statement of all receipts in the unorganized territories of Keewatin and the Mackenzie River Basin on account of revenue under the Customs Act or otherwise, for the last three years, and of the expenditure for public purposes during the same period. Presented 4th March, 1892.—*Hon. Mr. Girard*..... *Not printed.*



VOLUME 12—*Continued.*

- 31.** List of public officers to whom commissions have issued under chapter 19 of the Revised Statutes of Canada, during the past year, 1891. Presented 10th March, 1892, by Sir John Thompson.—  
*Printed in No. 16.*
- 32.** Detailed statement of all bonds and securities registered in the department of the secretary of state of Canada, since last return, 1891, submitted to the parliament of Canada under section 23, chapter 19, of the Revised Statutes of Canada. Presented 10th March, 1892, by Sir John Thompson.  
*Not printed.*
- 33.** Return to an order of the House of Commons, dated 1st July, 1891, for a return giving : 1. The number of Chinese immigrants that have entered Canada since the date of the last return ordered by the House, specifying : (a). The ports at which said Chinese immigrants were entered ; (b). The amount of duty or head-money collected ; (c). The number that entered by virtue of return certificates ; (d). The number of return certificates issued during the same period, and the number of Chinese that during the same period passed through Canada in bond to destinations out of Canada. 2. The number that entered Canada as belonging to the diplomatic or consular service of China. 3. The number of Chinese that entered Canada during the same period, either as tourists, men of science, students or merchants. 4. Copies of all correspondence, if any, between the imperial government and this government, or between this government and the government of China, if any, or between the government of British Columbia and this government, or with any labour organization, or with any company, corporation or person, having reference to the Chinese Restriction Act or suggesting amendments to the same. Presented 10th March, 1892.—*Mr. Gordon.*  
*Not printed.*
- 34.** Return under resolution of the 20th February, 1882, in so far as the same is furnished by the department of interior, respecting the Canadian Pacific Railway Company. Presented 11th March, 1892, by Hon. E. Dewdney.....*Printed for sessional papers only.*
- 34a.** List of lands sold by the Canadian Pacific Railway Company from the 1st October, 1890, to the 1st October, 1891. Presented 6th April, 1892, by Hon. J. Haggart .....*Not printed.*
- 35.** Return to an order of the House of Commons, dated 13th July, 1891, for a return of all letters, correspondence, petitions and papers, not otherwise brought down, between all persons in the department of marine and fisheries relating to sawdust in the LaHave River, Lunenburg County, N.S., with the object of having the river relieved from the operation of the said act. Also a list of rivers and streams exempted from the operations of the act, and a return of all letters, correspondence, petitions and papers between all persons and the department of marine and fisheries relating to such exemptions. Presented 14th March, 1892.—*Mr. Kaulbach and Mr. Flint.*.....*Not printed.*
- 36.** Return of orders in council relating to the department of the interior, in accordance with sub-clause (d) of section 38 of the Regulations for the Survey, Administration, Disposal and Management of Dominion Lands, within the 40 mile Railway Belt, in the province of British Columbia. Presented 15th March, 1892, by Hon. E. Dewdney.....*Printed for sessional papers only.*
- 36a.** Return of orders in council relating to the department of the interior, in accordance with clause 91 of the Dominion Lands Act, chapter 54, Revised Statutes of Canada. Presented 15th March, 1892, by Hon. E. Dewdney .....*Printed for sessional papers only.*
- 37.** Copies of documents relating to the negotiations at the conference recently held at Washington, between the delegates from the Canadian government and the secretary of state of the United States, respecting the extension and development of trade between the United States and Canada, and other matters. Presented 16th March, 1892, by Sir John Thompson.  
*Printed for both distribution and sessional papers.*
- 38.** Statements of the quantity of pig iron manufactured in Canada, upon which bounties are claimed, the names of claimants and the amount paid in each case. Presented 16th March, 1892, by Hon. M. Bowell.....*Printed for sessional papers only.*
- 39.** Return to an address of the Senate to his excellency the Governor General, dated 3rd March, 1892, praying that his excellency will cause to be laid before this House, a copy of the resignation, by the Honourable John Carling, Minister of Agriculture, of the seat in the Senate occupied by him at close of the last session of parliament. Presented 17th March, 1892.—*Hon. Mr. Power.*—  
*Not printed.*

## VOLUME 12—Continued.

40. Return to an order of the House of Commons, dated 5th May, 1891, for copy of all correspondence between the government or the postmaster general's department with Mr. Andrew Allan or any other parties, for the conveyance of the mails between Canada and the United Kingdom. Presented 18th March, 1892.—*Mr. Mills (Bothwell)*.....*Not printed.*
41. Return (in part) to an order of the House of Commons, dated 14th March, 1892, for copies of all the original lists and papers, including all declarations, notices of appeal, objections to preliminary lists, and relating to all other proceedings, now in the possession of the revising barrister or the clerk of the crown in chancery, in any way affecting the voters' lists for the electoral division of the county of Lennox as settled by the revision of 1891, together with a certified copy of the revised voters' list of 1891 furnished by the revising barrister to the returning officer. Presented 21st March, 1892.—*Mr. Wilson (Lennox)* ..... *Not printed.*
- 41a. Return to an address of the House of Commons to his excellency the Governor General of the 21st March, 1892, for : 1. Copies of the judgment given by the revising officer on objections taken to the names of Lewis Allin, S. F. Glass and James P. Moore and 226 others on the voters' list of the city of London, province of Ontario, and which 229 names were subsequently struck off the said voters' list, by the revising officer, on the hearing of the objections, but which were nevertheless printed on the said voters' list is the subject of an appeal, together with copies of the notices of objection to such names and copies of the evidence taken before and decision given by the revising officer on each such name. 2. Copies of all proceedings in appeal taken to the county court judge from the judgment of the revising officer on any or all of such cases, together with any judgment or decision given by such county court judge thereon. 3. Copies of the judgment of the Queen's bench division, high court of justice, Ontario, in the matter of an application to said court for a mandamus to said revising officer in respect of the said votes or any of them, together with copies of the judgment of the court of appeal (Ontario) in respect of the same matter. Presented 11th April, 1892.—*Mr. Sutherland*.....*Not printed.*
- 41b. Supplementary return to an order of the House of Commons, dated 14th March, 1892, for copies of all the original lists and papers, including all declarations, notices of appeal, objections to preliminary lists, and relating to all other proceedings, now in the possession of the revising barrister or the clerk of the crown in chancery, in any way affecting the voters' lists for the electoral division of the county of Lennox as settled by the revision of 1891, together with a certified copy of a the revised voters' list of 1891 furnished by the revising barrister to the returning officer. Presented 21st April, 1892.—*Mr. Wilson*.....*Not printed.*
- 41c. Return to an order of the House of Commons, dated 9th May, 1892, for a return showing the number of voters in the several electoral districts of the province of British Columbia, and the number of voters in each polling district of the electoral district. Presented 12th May, 1892.—*Mr. Mara*.  
*Not printed.*
42. Return to an address of the House of Commons to his excellency the Governor General, dated 17th March, 1892, for a return of the proceedings had at the trial of the recent election petition relating to the election of a member for the electoral district of the county of Welland, together with the findings of the judges who tried the said petition upon the same, and of all evidence taken thereat ; also a certified copy of the case and factums filed upon the appeal from such findings or any of them with the registrar of the Supreme Court of Canada. Also a copy of any report and communication made to Mr. Speaker by the said judges in reference to the said petition. Presented 22nd March, 1892.—*Mr. Tisdale* ... ..*Not printed.*
43. Return to an order of the House of Commons, dated 7th March, 1892, for a return, in the form used in the statements usually published in the *Gazette*, of the exports and imports from the 1st day of July, 1891, to the 1st day of March, 1892, distinguishing the products of Canada from those of other countries ; and comparative statements from the 1st day of July, 1890, to the 1st day of March, 1891. Presented 22nd March, 1892.—*Mr. Sutherland* .. ..*Not printed.*
44. Return to an order of the House of Commons, dated the 9th March, 1892, for a return showing the total quantity of Canadian flour exported to Newfoundland in each of the years 1890 and 1891 ; the law and regulations of the Newfoundland Government relating to the importation into that colony of flour ; the total quantities of Canadian cattle, beef, pork, hogs and cheese exported to Newfoundland in each of the years 1890 and 1891. Presented 22nd March, 1892.—*Mr. Hughes*.  
*Not printed.*



VOLUME 12—*Continued.*

- 45.** Supplementary return to an order of the House of Commons, dated 17th March, 1890, for a return of all correspondence, memorials and agreements between the government and the Temperance Colonization Company, together with correspondence of settlers, employees and members of the company, relative to the operations of the said company. Presented 23rd March, 1892.—*Mr. Wallace*.....*Not printed.*
- 46.** Return to an address of the House of Commons to his excellency the Governor General, dated 14th March, 1892, for a copy of the judgment of the Supreme Court in the appealed case of *Barrett vs. the City of Winnipeg*, commonly known as the “Manitoba School Case.” Presented 23rd March, 1892.—*Mr. LaRivière*.....*Printed for both distribution and sessional papers.*
- 47.** Report of the Commissioners appointed to consider the advisability of extending the Trent Valley Canal, and to what extent. Presented 24th March, 1892, by Hon. J. Haggart.  
*Printed for both distribution and sessional papers.*
- 47a.** Return to an address of the House of Commons to his excellency the Governor General, dated 10th March, 1892, for a return of all tenders received by the department of railways and canals for sections 11, 12 and 13 of the proposed Soulanges Canal. Such return to comprise : (a) The aggregate amount of each tender ; (b) The quantity of each class of work in the schedules of each section ; (c) The amount of each tender in detail as “moneyed out” by the product of the quantity and price of each item ; (d) Copies of all reports to, and orders in council relative to said tenders ; (e) Copies of all reports of engineers on each of said sections ; (f) Copies in detail of all estimates of engineers on each section, showing quantity, price and amount of each class of work in schedule ; (g) Copies of all correspondence relative to said tenders. Presented 9th May, 1892.—*Mr. Sutherland*.....*Not printed.*
- 47b.** Return to an order of the House of Commons, dated 17th March, 1892, for copies of engineers’ reports which led to the building of the Beauharnois Canal ; of engineers’ reports in favour of the building of the Soulanges Canal, and of reports, letters, etc., from engineers, masters or pilots, objecting to the building of the canal at Soulanges. Presented 9th May, 1892.—*Mr. Bergeron*....*Not printed.*
- 48.** Return to an order of the House of Commons, dated 17th June, 1891, for a return of all payments and cost of construction of the New Carlisle wharf, including amount paid to the crown lands department and owners of timber limits in the county of Bonaventure, for timber used on the said works. Presented 31st March, 1892.—*Mr. Fauvel*.....*Not printed.*
- 48a.** Return to an order of the House of Commons, dated 20th July, 1891, for : 1. A detailed statement of work done on the wharves at Longueuil and Boucherville, in the county of Chambly, since the commencement of the said works in 1886. 2. A detailed statement of the several sums expended by the government in connection with the said works, showing the names of persons to whom such several sums were paid, and why and under what arrangement or contract such payments were made. 3. Copies of all reports of engineers on the said wharves, and of the estimates, and also of all letters addressed to the department of public works in relation to the said works. Presented 13th April, 1892.—*Mr. Beausoleil*.....*Not printed.*
- 49.** Copy of a report of a committee of the privy council, appointed to investigate and report upon the cases of irregularity in the civil service as developed in the public accounts committee, etc. Presented 31st March, 1892, by Hon. G. E. Foster.....*Printed for sessional papers only.*
- 50.** Return to an order of the House of Commons, dated 23rd March, 1892, for a return showing the number of cows kept at the Central Experimental Farm between the first day of January, 1891, and the first day of January, 1892. The number of cows of each of the different breeds ; the quantity of milk given by each cow ; the quantity of milk to make a pound of butter ; the quantity of milk sold ; the quantity of butter sold ; where sold, and the prices obtained each month ; the kinds of food given and the value of the same. Presented 31st March, 1892.—*Mr. McMillan (Huron)*.  
*Not printed.*
- 50a.** Return to an order of the House of Commons, dated 30th March, 1892, for a statement showing : 1. The number and location of the several experimental farms. 2. The amount expended on each of them since the date of its establishment. 3. The name of each and every employee of each farm, and a statement of the salary and of any other emoluments received from the government by each of them. Presented 2nd June, 1892.—*Mr. Frémont*.....*Not printed.*



## VOLUME 12—Continued.

51. Return to an address of the House of Commons to his excellency the Governor General, dated 27th May, 1891, for copies of all papers, correspondence and documents, together with reports of the minister of justice and order in council relating to the disallowance of an act passed by the local legislature of the province of Manitoba, on the 31st day of March, 1890, intituled: "An Act respecting the Diseases of Animals." Presented 31st March, 1892.—*Mr. Watson* . . . . . *Not printed.*
52. Return to an address of the House of Commons to his excellency the Governor General, dated 27th May, 1891, for copies of all papers, correspondence and documents, together with the report of the minister of justice and order in council relative to the disallowing an act passed by the legislature of the province of Manitoba, on the 31st March, 1890, intituled: "An Act to authorize companies, institutions or corporations incorporated out of this province to transact business therein." Presented 31st March, 1892.—*Mr. Watson* . . . . . *Not printed.*
53. Return to an order of the House of Commons, dated 21st March, 1892, for a return showing the quantities of each of the following classes of pork and hog products imported into Canada from the United States, in each of the years 1888-89, 1889-90 and 1890-91; with the value thereof and amounts of duty and rates levied thereon: Bacon and hams, shoulders and sides; lard, tried or rendered; lard, untried; pork; pork barrelled in brine, made from the sides of heavy hogs, after the hams and shoulders are cut off, and containing not more than sixteen pieces to the barrel of two hundred pounds weight; pork, imported in the carcass for exportation. Presented 31st March, 1892.—*Mr. Hughes* . . . . . *Not printed.*
54. Return to an order of the House of Commons, dated 21st March, 1892, for a return showing the quantity of the shipments in the following lines from Canada, from 30th June, 1891, to 31st December, 1891, and the country to which shipped: The number of horses of all kinds; the number of sheep; the quantity of eggs; the number of bushels of barley; the quantity of malt; the number of tons of hay; the number of bushels of potatoes; giving the quantity shipped to each country, and the total shipments in the several lines. Presented 31st March, 1892.—*Mr. McMullen* . . . . . *Not printed.*
55. Return to an order of the House of Commons, dated 21st March, 1892, for a return showing the quantities of beef salted in barrels; dried or salted meats and meats preserved in any other way than salted or pickled; other meats fresh or salted, n. e. s.; butter, cheese and horses imported into Canada from the United States in each of the three years 1888-89, 1889-90 and 1890-91; with the values thereof and rates of duty thereon. Presented 31st March, 1892.—*Mr. Hughes* . . . . . *Not printed.*
56. General Order No. 86 of the Supreme Court of Canada. Presented 1st April, 1892, by Sir John Thompson . . . . . *Printed for sessional papers only.*
57. Return to an order of the House of Commons, dated 17th March, 1892, for a statement showing the amount of money expended by the government of Canada in the years 1890-91 on piers, breakwaters, etc., in Prince County, Prince Edward Island; the amount expended on each of these works, the work let by contract and to whom let; also showing the total amount voted during said years and the amount not expended. Presented 5th April, 1892.—*Mr. Perry* . . . . . *Not printed.*
58. Return to an order of the House of Commons, dated 7th March, 1892, for a statement showing the number of petitions for prohibition presented to the House of Commons during the session of 1891: 1. Total number of petitions presented. 2. Total number of signatures to these petitions. 3. Number of (1) petitions; (2) signatures: (a) presbyterian church; (b) methodist church; (c) baptist church (separate figures for free baptists); (d) episcopal church or church of England; (e.) salvation army. 4. Number of (1) petitions; (2) signatures from each province and each territory; name and figures for each province and each territory separately. 5. Number of separate petitions from churches, courts and temperance societies, or any other bodies signed by officials, giving name of church, court, temperance society, etc., sending such petitions, with number of signatures. Presented 7th April, 1892.—*Mr. Fraser* . . . . . *Printed for sessional papers only.*
59. Return to an order of the House of Commons, dated 30th March, 1892, for a return showing: 1. The corps of the active militia of Canada that have been drilled (a) annually, (b) biennially, and (c) triennially, in the period 1889-1891, inclusive. 2. The number of qualified combatant officers in in each corps. 3. The number of provisionally appointed officers in each corps, specifying those whose period for qualification has expired. 4. The name, length of service and age of each commanding officer upwards of sixty years of age. 5. The actual strength of, and number of enlistments in, during the year 1891, each of the permanent corps located in Ontario, Quebec and New Brunswick. Presented 7th April, 1892.—*Mr. Hughes* . . . . . *Not printed.*

## VOLUME 12—Continued.

- 60.** Communication and petition from the Quebec Board of Trade concerning the abolition of all dues collected on tonnage in the port of Quebec, etc. Presented 11th April, 1892, by Hon. C. H. Tupper. . . . . *Not printed.*
- 60a.** Copy of certain resolutions passed at a meeting of the Halifax Board of Trade relative to the hostile legislative enactments between the Governments of Newfoundland and Canada, the desirability of arranging, if possible, a *modus vivendi*, under the terms of which the hostile tariffs and enactments of both countries should be held in abeyance, until sufficient time be given to enable diplomatic conferences to adjust the whole difficulty, etc. Presented 21st April, 1892, by Hon. C. H. Tupper. . . . . *Not printed.*
- 61.** Return to an order of the House of Commons, dated 29th February, 1892, for a detailed statement showing: 1. Traffic at Mulgrave Station for the six months ending 31st December, 1890 and 1891; also for the months of January, 1891 and 1892. The return to include sale of tickets, freight received and freight sent. 2. The number of staff employed during the said month, salaries paid and amount paid for extra labour, with the names of staff and extra labour employed. 3. Return of work done by shunting engine during said periods, and the number of men employed in shunting, and the cost. 4. If there is a yard-master at said station, when he was appointed, whether he has an assistant, and, if so, when such assistant was appointed and what pay each receives. 5. The number of men employed in the scow at the said station, their names, and whether they are paid by the hour or by the day and at what rate. Presented 13th April, 1892.—*Mr. Fraser.* *Not printed.*
- 61a.** Return to an order of the House of Commons, dated 4th April, 1892, for copies of all reports and correspondence between the department of railways and canals and the superintendents of the different services of the Intercolonial Railway, in reference to an accident to a train at Truro, in charge of Conductor H. D. Archibald, and his subsequent dismissal. Presented 11th May, 1892.—*Mr. Patterson (Colchester).* . . . . . *Not printed.*
- 61b.** Return to an order of the House of Commons, dated 2nd May, 1892, for a return showing the amount of additional property purchased on or adjacent to government railways for increased accommodation or other purposes; the quantity purchased or paid for within the period from the 1st of July, 1891, to the 1st of April, 1892; the party from whom purchased; the price paid; the purpose for which the property is used or is to be used. Presented 11th May, 1892.—*Mr. McMullen.* . . . . . *Not printed.*
- 61c.** Return to an Order of the House of Commons, dated 13th of April, 1892, for a return containing a statement of the expenditure out of income made for permanent improvements, extensions, additions and betterments, exclusive of works of ordinary maintenance and renewals, on account of the Intercolonial Railway from 30th June, 1881, to 1st July, 1891. The return to show such expenditure in summary form for each branch of service as nearly as can be conveniently ascertained from the accounts. Presented 25th May, 1892.—*Mr. McDougald (Picton).*
- Printed for sessional papers only.*
- 61d.** Return to an order of the House of Commons, dated 9th May, 1892, for a return showing: 1. Tariffs in force on live stock on the Intercolonial Railway, and all changes in same during last five years. 2. Number of cattle shipped from Sackville, Nappan, Aulac and Amherst stations each year, with destination, distinguishing between car load lots and less than car load lots. Presented 9th June, 1892.—*Mr. Wood (Westmoreland).* . . . . . *Not printed.*
- 61e.** Return to an order of the House of Commons, dated 23rd March, 1892, for copies of all evidence taken at an inquiry held at Lévis, in the month of February, 1892, respecting the discharge of Michael Quinn, a permanent employee in the shops of the Intercolonial Railway at Hallow, Lévis; and of all correspondence between Alfred Drake, Chief Mechanical Engineer for the said railway at Hallow, and the railway officials at Moncton, in relation to the dismissal of the said Michael Quinn. Presented 5th July, 1892.—*Mr. Guay.* . . . . . *Not printed.*
- 62.** Return to an order of the House of Commons, dated 30th March, 1892, for copies of all petitions, correspondence, letters, telegrams and memoranda received since 1887, asking for or referring to the subsidizing of the Annapolis and Atlantic Railway Company or a line of railway from Liverpool and Shelburne to Annapolis, passing through Caledonia. Presented 13th April, 1892.—*Mr. Forbes.* . . . . . *Not printed.*
- 63.** Return to an order of the House of Commons, dated 28th March, 1892, for a return of all petitions of boards of trade, railway companies, and documents generally, concerning the construction of a new bridge across the Lachine Canal at Montreal. Presented 13th April, 1892.—*Mr. Curran.*

*Not printed.*



VOLUME 12—*Continued.*

- 63a.** Return to an order of the House of Commons, dated 11th May, 1892, for copies of all documents, memorials and correspondence between the government and the corporation and board of trade of the town of Sorel and other persons, respecting the granting of a subsidy for the construction of a bridge on the Richelieu River to connect the town of Sorel with the Montreal and Sorel Railway. Presented 25th May, 1892.—*Mr. Bruncau*..... *Not printed.*
- 64.** Return to an order of the House of Commons, dated 23rd March, 1892, for copies of correspondence exchanged between the government and the postmaster of St. Césaire, county of Rouville, or any other person, with reference to deposits of money to be made by the said postmaster. Presented 19th April, 1892.—*Mr. Brodeur*..... *Not printed.*
- 65.** Return to an order of the House of Commons, dated 18th June, 1891, for a return showing the amount of money expended, and the year of expenditure, in each electoral district since confederation, under the following heads: 1. Public buildings. 2. Harbours and rivers. 3. Roads and bridges. Presented 26th April, 1892.—*Mr. Landerkin*..... *Printed for sessional papers only.*
- 66.** Return to an order of the House Commons, dated 1st July, 1891, for a return of all correspondence, telegrams, letters, reports, estimates and other documents relating to the surveys for, and construction and cost of a sub-marine tunnel between Prince Edward Island and the mainland. Presented 27th April, 1892.—*Mr. Davies*..... *Not printed*
- 66a.** Return to an order of the House of Commons, dated 23rd March, 1892, for all correspondence, reports, etc., which may have taken place between the government of Canada and Sir Douglas Fox, or any other engineer, since the 1st day of September, 1891, having reference to building a tunnel from Prince Edward Island to the mainland across the Straits of Northumberland. Presented 3rd May, 1892.—*Mr. Perry*..... *Printed for sessional papers only.*
- 67.** Return to an order of the House of Commons, dated 9th March, 1892, that a map of the Dominion be laid upon the table showing the boundaries of townships, counties and electoral divisions in each province, and the number of votes polled in each township for each candidate at the general election in March, 1891. Presented 27th April, 1892.—*Mr. Mills (Bothwell)*..... *Not printed.*
- 68.** Return to an address of the House of Commons to his excellency the Governor General, dated 14th March, 1882, for copies of all correspondence between the government of Canada or any member thereof, and the British government, or between the government of Canada and any person or persons, relating to the admission of live cattle from the United States. Also for copies of all orders in council relating to the same. Presented 29th April, 1892.—*Mr. Somerville*.  
*Printed for sessional papers only.*
- 69.** Return to an order of the House of Commons, dated 14th March, 1892, for a return of copies of all tenders received for engraving and printing since 1882, and of all contracts entered into for the same, including the contract beginning in this present year; also all correspondence relating to the subject since 1882. Presented 3rd May, 1892.—*Mr. Somerville*..... *Not printed.*
- 70.** Return to an address of the House of Commons to his excellency the Governor General, dated 30th March, 1892, for a return of all correspondence, telegrams or other documents between the government of Canada and the imperial government or the government of Newfoundland, or between any member or representative of either of such governments respecting the admission of Newfoundland into the dominion of Canada; including all correspondence or telegrams to and from the high commissioner on the subject; and all reports to and minutes of council thereon. Also copies of any terms or offers which may have been submitted to the government of Newfoundland or any member thereof, with respect to the admission of that island into the dominion. Presented 4th May, 1892.—*Mr. Davies*..... *Printed for sessional papers only.*
- 71.** Return to an address of the House of Commons to his excellency the Governor General, dated 10th March, 1892, for copies of all correspondence, memorials, departmental orders, and orders in council respecting the north-western, northern and eastern boundaries of the province of Quebec, received or passed during the last five years and not already laid before this House, together with all the reports of surveys or explorations ordered thereon by the government of Canada during the same period. Presented 5th May, 1892.—*Sir H. Langevin*.  
*Printed for sessional papers only.*
- 72.** Return to an address of the House of Commons to his excellency the Governor General, dated 9th May, 1892, for a copy of the instructions appended to commission of the lieutenant governors of the provinces of Canada. Presented 9th May, 1892.—*Mr. Laurier*..... *Not printed.*



## VOLUME 12—Continued.

- 73.** Return to an order of the House of Commons, dated 14th March, 1892, for a return of all correspondence, engineers' reports, petitions or other documents relating to the survey or deepening of the channel of the Galops Rapids, and for a statement of the work performed by the chain tug "Troquois," owned by the government, and of the services performed by one John Stitt, in connection with said tug. Presented 9th May, 1892.—*Mr. Somerville*..... *Not printed.*
- 73a.** Return to an order of the House of Commons, dated 11th March, 1892, for a return of all surveys, plans, specifications, contracts, reports and papers connected with the new channel in the Galops Rapids. 2. All reports of engineers as to the striking of steamer "Traveller" in Galops Rapids, in October, 1889. 3. All reports from any steamboat captain who may have reported as to the state of said channel. 4. Statement of cost of investigation by engineers in 1891. 5. Reports from engineers sent to investigate said channel in 1891. 6. Copies of evidence given as to the depth, quantities, etc. Presented 30th May, 1892.—*Mr. Reid*. ... .. *Not printed.*
- 74.** Return to an address of the House of Commons to his excellency the Governor General, dated 4th April, 1892, for copies of the original letters patent of incorporation of the Dominion Cotton Mills Company (Limited), and of the supplementary letters patent increasing the capital stock of the said company from \$100,000 to \$5,000,000, and copies of all correspondence, petitions, statements and evidence submitted to the government in support of the issue of such supplementary letters patent. And also for copies of the original letters patent incorporating the Canadian Coloured Cotton Mills Company (Limited), and of the supplementary letters patent increasing the capital stock of the said company from \$100,000 to \$5,000,000, and copies of all correspondence, petitions, statements and evidence submitted to the government in support of the issue of said supplementary letters patent. Presented 9th May, 1892.—*Mr. Edgar*..... *Not printed.*
- 75.** Return to an order of the House of Commons, dated 2nd May, 1892, for all correspondence concerning the appointment of Mr. W. H. Ingram as Collector of Customs at St. Thomas, Ont. Presented 10th May, 1892.—*Mr. Casey*..... *Not printed.*
- 76.** Return to an address of the House of Commons to his excellency the Governor General, dated 2nd May, 1892, for copies of all correspondence, memorials and documents exchanged between the government, or any member thereof, and any persons, companies or corporations as to the propriety or advisability of relieving or recouping the county of Pontiac railway indebtedness. Presented 11th May, 1892.—*Mr. Murray*..... *Not printed.*
- 77.** Return to an order of the House of Commons, dated 2nd May, 1892, for a detailed copy of the certificate of acting chief engineer that \$32,000 paid to Bancroft & Connolly was done in addition to all previous certificates on Kingston Graving Dock, as mentioned in Auditor General's Report, page C—119. Presented 12th May, 1892.—*Mr. Gibson*..... *Not printed.*
- 78.** Return to an order of the House of Commons, dated 14th March, 1892, for: 1. Copy of the circular issued on the 10th June, 1891, by the department of marine, relative to sick mariners' dues in Canada. 2. A list of persons to whom such circular was addressed. 3. Copy of all answers received. Presented 16th May, 1892.—*Mr. Laurier*..... *Not printed.*
- 79.** Report of the Royal Commission appointed to investigate the working of Civil Service Act, and other matters connected with the Civil Service generally. Presented 20th May, 1892, by Sir John Thompson..... *See No. 16c.*
- 80.** Return to an address of the House of Commons to his excellency the Governor General, dated 2nd May, 1892, for a return stating, for the last year (1891): 1. The number of applications which were made to the railway committee of the privy council for an adjudication, order or direction respecting any of the matters or things which, under the provisions of the Railway Act, the railway committee had power or authority to deal with. 2. Showing in general terms the nature of the application. 3. The names of the members of the honourable the privy council who (a) Heard each of the applications; (b) Who were present at any one or more adjourned hearings thereof, and at the final adjudication thereof; (c) In cases in which adjournments took place, the dates of hearing, and subsequent adjournment or adjournments of final adjudication. 4. Statement showing how each of said applications was disposed of, viz.: Granted or refused, or partially granted. Presented 25th May, 1892.—*Mr. McCarthy*..... *Not printed.*
- 80a.** Return to an address of the House of Commons to his excellency the Governor General, dated 2nd May, 1892: 1. For a statement of all applications or complaints made to the railway committee of the privy council respecting the matters or things referred to in sub-sections (k), (l), (m), (n) and

VOLUME 12—*Continued.*

(p) of clause eleven of the Railway Act. 2. By or against whom such complaints were made. 3. The manner in which the same were dealt with or disposed of. Presented 25th May, 1892.—*Mr. McCarthy*.....*Not printed.*

**81.**—(1891.) Return to an address of the House of Commons to his excellency the Governor General, dated 3rd June, 1891, for copies of all correspondence between the imperial government and the government of Canada, on the subject of the copyright laws of Canada, and all other papers relating thereto, not already brought down. Presented 24th August, 1891.—*Mr. Edgar.*

*Printed for sessional papers only.*

**81.** Return (in part) to an order of the House of Commons, dated 23rd March, 1892, for a return showing which of the dominion buildings in Canada are lighted by electricity; the respective system used in each such building, whether arc or incandescent; the number of sixteen candle-power lamps or their equivalents used in each such building; the cost per lamp of sixteen candle power or equivalent in each building; and the average annual cost for lighting each such building. Also showing in what buildings the plants are owned and maintained by the government, and in cases where not so owned and maintained, from whom the current is obtained or supplied, and whether from central station or private parties; also whether in cases of leased currents the renewal lamps are supplied at government expense, and if so, in what buildings and at what annual cost; also the names of the parties contracting to light any of such buildings, with the names of the buildings, and the dates and duration of each such contract. Also showing which of the public buildings of the dominion are lighted with gas, and the annual cost of lighting each such building. Presented 25th May, 1892 ..... *Not printed.*

**82.** Return to an order of the House of Commons, dated 2nd May, 1892, for a return giving all papers, letters, petitions, applications and every other document relating to the dismissal of the postmaster of Eugenia, and the appointment of his successor. Presented 30th May, 1892.—*Mr. Landerkin*—*Not printed.*

**83.** Return to an order of the House of Commons, dated 16th May, 1892, for a return showing the names of the mail conductors superannuated, their number of years of service, the salary given to each of them during the last year of service, and also the names of those who have had several years added to their period of service. Presented 30th May, 1892.—*Mr. Brodeur*.....*Not printed.*

**84.** Return to an order of the House of Commons, dated 1st March, 1892, for a return showing the number of royal commissions that have been issued in each and every year since confederation, and to whom issued, together with the subject inquired into, giving the cost of each and the total cost of all. Presented 1st June, 1892.—*Mr. Landerkin*.....*Printed for sessional papers only.*

**84a.** Supplementary return to an order of the House of Commons, dated 1st March, 1892, for a return showing the number of royal commissions that have been issued in each and every year since confederation, and to whom issued, together with the subject inquired into, giving the cost of each and the total cost of all. Presented 9th June, 1892.—*Mr. Landerkin*.—

*Printed for sessional papers only.*

**85.** Statement of number of hours of setting upon the daily Senate *Hansard*, and number of ems set, including corrections, up to 20th May. Presented 2nd June, 1892, by Hon. Sir J. C. Abbott.—

*Not printed.*

**86.** Return to an address of the House of Commons to his excellency the Governor General, dated 25th April, 1892, for a copy of the petition presented and filed in the supreme court of Nova Scotia, under the Dominion Controverted Elections Act, against the election and return of Joseph A. Gillies, for the county of Richmond, Nova Scotia, at the general election holden on the 5th March, 1891; together with the dates of filing and service of such petition; and also all papers and documents in connection with the following proceedings in the supreme court of Nova Scotia: 1. Application to the honourable the chief justice extending the time for setting the petition down for trial. 2. Application to set the petition down for trial returnable before the Honourable Mr. Justice Weatherbe, and the Honourable Mr. Justice Graham, but heard by the Honourable Judge Weatherbe, sitting alone, on the 19th day of November, 1891. 3. The order made by the said Judge Weatherbe, sitting alone, for the trial of the said petition, fixing the 8th of December, 1891, the date for said trial. 4. The notice of appeal, dated 28th November, 1891, from this decision of the Honourable Judge Weatherbe, to the supreme court of Nova Scotia, the grounds of appeal being as follows: (a) Because there was no jurisdiction to make said order, or the portion



## VOLUME 12—Continued.

thereof extending time ; (b) Because six months had elapsed since the presentation of the petition ; (c) Because the time and place of trial were not fixed within six months from the presentation of the petition ; (d) Because the extension of time granted by said order was not made on application for that purpose, supported by affidavits, and it does not appear from such order, and it was not made to appear when the same was made, that the requirements of justice rendered such enlargement necessary ; (e) Because the respondent had no notice of any application to extend the time for the commencement of the trial herein ; (f) Because one judge has no jurisdiction to fix the time and place of trial ; (g) Because the trial of the petition cannot be commenced during the term of the court at which the judges assigned to try the said petition are bound to sit. 5. The notice of motion on said appeal for the 3rd day of December, 1891. 6. The appointment by the Honourable Judge Weatherbe, then senior judge, for a hearing before the supreme court on the said 3rd day of December, 1891. 7. The postponement of this hearing until a later day. 8. The judgment of the supreme court upon this case. 9. The rule of the supreme court, dated the 19th day of December, 1891, setting aside the order of the Honourable Judge Weatherbe fixing the date of the trial of said petition. 10. The date on which the Honourable Judge Weatherbe and the Honourable Judge Graham received a copy of the order of the supreme court setting aside the said order of Judge Weatherbe for trial. 11. The date on which the said judges reported to the Honourable the Speaker of the House of Commons that the said petition had been heard by them, and that they had declared the election of the said Joseph A. Gillies void, and his seat in parliament vacant. 12. The date upon which application was made to the Honourable Judge Weatherbe to defer the decision in the petition pending the decision of the supreme court of Nova Scotia on the question of jurisdiction, and the refusal of this application. Also copies of the several petitions presented and filed in the supreme court of Nova Scotia under the Dominion Controverted Elections Act, against the election and return of Hon. Sir John Thompson, Hon. C. H. Tupper, Mr. C. E. Kaulbach, Mr. J. B. Mills, Mr. N. W. White and Mr. Hugh Cameron, for six of the several counties of the province of Nova Scotia, at the general election held on the 5th March, 1891. Also all papers and documents in connection with the various proceedings in the said cases in the supreme court of Nova Scotia. Presented 3rd June, 1892.—*Mr. Gillies and Mr. Forbes.*

*Not printed.*

87. Return to an address of the House of Commons to his excellency the Governor General, dated 30th March, 1892, for copies of all accounts, claims and certificates presented and transmitted (from 1st July, 1885, to this day) to the dominion government, by each of the judges of the superior court for the province of Quebec, in his capacity as such, for all travelling expenses and hotel expenses, in any place other than that in which such judge had orders to reside, or did in fact reside, either for sitting or for acting therein, or for holding therein (in such capacity) any court in civil, criminal or other matters ; together with a detailed statement of the several sums paid in conformity with such accounts, claims and certificates. Presented 3rd June, 1892.—*Mr. Flint.*

*Not printed.*

88. Further supplementary return to an address of the Senate, to his excellency the Governor General, dated 14th September, 1891, for all correspondence between his excellency the Governor General and the Lieutenant Governor of the province of Quebec, in connection with the Baie des Chaleurs Railway, and all other papers and correspondence in the possession of the government on that subject. Presented 31st May, 1892.—*Hon. Mr. Miller.*.....*Not printed.*

89. Return to an order of the House of Commons, dated 25th April, 1892, for a return of the amount of crude cotton-seed oil imported into Canada during the year 1891 ; also the amount of refined cotton-seed oil imported into Canada during the year 1891. Presented 7th June, 1892.—*Mr. McKay.*

*Not printed.*

90. Return to an address of the Senate to his excellency the Governor General, dated 5th May, 1892, for copies of all letters, communications and reports in the possession of the government, having relation to the fixing of a standard of time, and which have been received subsequent to May, 1891. Presented 14th June, 1892.—*Hon. Mr. Sullivan.*.....*Not printed.*

91. Return to an order of the House of Commons, dated 10th June, 1892, for a copy of the Reports of the British Farm Delegates, Messrs. McQueen and Davey, on the Maritime Provinces. Presented 15th June, 1892.—*Mr. McMillan (Huron).*.....*Not printed.*

92. Return to an order of the House of Commons, dated 15th June, 1892, for a copy of the minutes of the evidence taken at the trial, under the Dominion Controverted Elections Act, of the case of A. Sturton *et al*, petitioners, *vs.* P. V. Savard, defendant, in relation to the election for the counties of Chicoutimi and Saguenay, in the year 1891. Presented 15th June, 1892.—*Sir John Thompson.*

*Not printed.*



VOLUME 12—*Continued.*

93. Return to an order of the House of Commons, dated 18th June, 1891, for copies of all papers and correspondence in the department of marine and fisheries, relating to the saving of the lives of part of the crew of H.M.S. "Lily," wrecked on the coast of Labrador, in September, 1889. Presented 17th June, 1892.—*Mr. Edgar*.....*Not printed.*
94. Return to an address of the House of Commons to his excellency the Governor General, dated 10th August, 1891, for copies of all orders in council, memorials, correspondence and documents respecting the rock-slide from the citadel at Quebec, on the 19th September, 1889. Presented 24th June, 1892.—*Mr. Frémont*.....*Not printed.*
95. Return to an order of the House of Commons, dated 4th April, 1892, for : 1. Return of all correspondence, papers, complaints or memoranda of any kind in relation to "The Temperance Colonization Society," received since or not included in a return furnished the House in 1890. 2. List of all stockholders of the company. 1st May, 1885, with amounts paid on calls of the shares, whether in cash, land credits, or otherwise, each year to date, stating what shares were forfeited, when and why. 3. List of stockholders at date of return, showing when they became such, with dates and amount of shares purchased, with price per share. (a) Number of calls on all shares, with details, dates, etc. 4. Amount earned in fees by directors each year to date. 5. Amount of money invested each year, and in what. (a) Total amount received on account of scrip and land sales to date. 6. List of scrip holders, with post office address, who purchased from the company (scrip issued) prior to 1st June, 1882, and since that date, giving date of issue, amount of land purchased by each, price per acre, amount paid thereon to date; showing if cancelled, when and on what conditions. 7. List of all other contracts for purchase of land issued, whether exchanged for scrip, amounts paid to date, whether contract is still in existence, why cancelled, and when. 8. Amount and details of land sales now current and for which land is to be supplied by the company. 9. List of all persons whose scrip was located on even-numbered sections in 1883, showing where located, new location subsequently, if any, with form of contract of even-numbered location. 10. List of homestead settlers in 1885. List at date (actual residents). 11. When contract with the company and government expired, with conditions of extension, if any; conditions of final settlement. 12. List of lands to be conveyed to the company under such settlement. The foregoing information to be furnished, if practicable, under affidavit of the president and accountant. Presented 30th June, 1892.—*Mr. Sproule*.....*Not printed.*
96. Census of Canada.—Bulletin No. 11. Nationalities. Birth places of the people. Presented 30th June, 1892, by Hon. J. Carling.....*Not printed.*
97. Return to an address of the House of Commons to his excellency the Governor General, dated 2nd May, 1892, for a copy of location ticket granted to John Alexander McLellan, of Cockburn Island, for lot 15 in the 5th concession, Cockburn Island; copy of all affidavits or declarations, letters and other papers from any person or persons to the department, or any officer of the department, in any way relating to said lot or the cancellation of the said ticket; and copy of any order made for the cancellation of said ticket. Also for a copy of the location ticket granted for lot 16 in the 4th concession, Cockburn Island, and any assignment or transfer thereof to Peter McLellan; copy of affidavits or declarations, letters and other papers from any person or persons to the department in any way relating to said lot or the cancellation of the said ticket, and copy of any order made for the cancellation of said ticket. Presented 5th July, 1892.—*Mr. Lister*.....*Not printed.*
98. Return to an order of the House of Commons, dated 28th March, 1892, for a return showing : 1. The number of Indian reserves in British Columbia. 2. The location of each and name of tribe to whom allotted. 3. The area in acreage of each. 4. The area cultivated on each reserve. 5. The population of each tribe when reserves were first established. 6. The present population of each tribe. 7. The area (estimated) of pastoral land on each reserve. 8. The number of horses, cattle and sheep owned by each tribe. 9. The estimated area of timber land on each reserve. Presented 5th July, 1892.—*Mr. Barnard*.....*Not printed.*
99. Copy of a report of a committee of the honourable the privy council, approved by his excellency the Governor General in council, on the 17th June, 1892, on the subject of a despatch dated 4th November, 1891, from Lord Knutsford, inviting an expression of the views of the Canadian government upon the complaint of alleged discrimination on the part of the government of Canada against citizens of the United States in the matter of canal tolls. Presented 6th July, 1892, by Sir John Thompson.....*Printed for sessional papers only.*

VOLUME 12—*Continued.*

- 100.** Return to an address of the Senate to his excellency the Governor General, dated 10th June, 1892, for a return of subsidy paid the Albert Southern Railway Company, showing the dates when paid, and to whom paid; also copies of all correspondence in reference to the payment of the said subsidy, and of all letters or telegrams asking for payment of same or relating thereto; also copies of all returns or reports of government engineers or inspectors, who inspected or reported on said road. Presented 6th July, 1892.—*Hon. Mr. Power*.....*Not printed.*
- 101.** Return to an order of the House of Commons, dated 9th May, 1892, for a return showing: 1. The total number of acres of public lands granted in Manitoba and the Canadian North-West in aid of railway construction, up to 26th April, 1892. 2. The name of each railway company or line to which a land grant has been made; the length of each line thus aided by land grant, and the number of acres granted to each company or line. 3. The total number of acres of land in Manitoba and the Canadian North-West which have been earned up to 26th April, 1892, under provisions of grants through completion of lines or portions of lines to which land grants have been made. 4. The name of each railway company or line which has earned the whole or a portion of its land grant, with the number of acres earned by each of such lines. Presented 9th July, 1892.—*Mr. Charlton*.....*Not printed.*
- 102.** Return to an order of the House of Commons, dated 21st March, 1892, for a map of Canada showing the areas of spruce and white pine timber, respectively, now standing. Presented 9th July, 1892.—*Mr. Ives*.....*Not printed.*
- 103.** Return to an address of the House of Commons to his excellency the Governor General, dated 25th April, 1892, for copies of all resolutions and memorials passed by the North-West Assembly at its last session and addressed to the government. Presented 9th July, 1892.—*Mr. Davin*..*Not printed.*
- 104.** Return to an address of the House of Commons to his excellency the Governor General, dated 21st March, 1892, for copies of all letters, correspondence, petitions, etc., relating to the claims or settlement, or proposed settlement of claims of settlers on the Waldron Rancho Company's territory; copies of all complaints made regarding the treatment settlers have been subject to by the company. Presented 9th July, 1892.—*Mr. McMullen*.....*Not printed.*
- 105.** Return to an order of the House of Commons, dated 28th March, 1892, for a return showing the quantity of binding twine imported for consumption in the Dominion, from the 1st of July, 1891, up to the first day of January, 1892; the country from which the same was imported, and the amount of duty paid thereon. Presented 9th July, 1892.—*Mr. Campbell*.....*Not printed.*





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ANNUAL REPORT

OF THE

DEPARTMENT OF FISHERIES

OF THE

DOMINION OF CANADA

1891

*PRINTED BY ORDER OF PARLIAMENT*



OTTAWA:

PRINTED BY S. E. DAWSON, PRINTER TO THE QUEEN'S MOST  
EXCELLENT MAJESTY.

1892

[No. 11—1891.] *Price 15 cents.*



*To His Excellency the Right Honourable Lord Stanley of Preston, P.C., G.C.B.,  
&c., &c., &c., Governor General of Canada, &c., &c., &c.*

MAY IT PLEASE YOUR EXCELLENCY :

The undersigned has the honour to present to Your Excellency the Annual Report of the Department of Fisheries for the year 1891.

All of which is respectfully submitted,

CHARLES H. TUPPER,

*Minister of Marine and Fisheries.*

OTTAWA, 25th May, 1892.





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EIGHTH ANNUAL REPORT

OF THE

DEPUTY MINISTER OF FISHERIES

1891

To the Honourable  
CHARLES H. TUPPER,  
Minister of Marine and Fisheries.

SIR,—I have the honour to submit the Annual Report of the Fisheries Department for the year 1891.

The reports of the Inspectors of Fisheries and Fishery Overseers throughout the Dominion, embracing the fisheries statistics and other material which are compiled to the end of the calendar year, will form the subject of a supplementary report.

EXPENDITURE AND RECEIPTS.

The total expenditure of the department for all services, except Civil Government, amounted, for the fiscal year, to \$374,202.16, from appropriations of \$428,420, leaving an unexpended balance of \$54,217.84, which lapses to the treasury, no portion of this sum having been brought down for expenditure during the current fiscal year.

The revenue of the department, including the receipts for licenses from United States fishing vessels, and the proceeds of the sale of the condemned schooner “David J. Adams,” amounted to the sum of \$70,794.42.

EXPENDITURE.

The sub-division of the expenditure is as follows :—

Service.	Expenditure	Vote.
	\$ cts.	\$ cts.
Fisheries .....	71,306 05	101,000 00
Fish-breeding.....	39,496 45	40,000 00
Fisheries protection service.....	83,050 16	100,420 00
Fishing bounty.....	166,967 22	167,000 00
Miscellaneous expenditure.....	13,382 28	20,000 00
Total .....	374,202 16	428,420 00

In addition to the above, the following summary shows the salaries and disbursements of fishery officers in the several provinces, together with the expenses for maintenance of the different fish-breeding establishments throughout the Dominion :—

Service.		Expenditure	Vote.
		\$ cts.	\$ cts.
Fisheries, Ontario		15,540 30	23,000 00
do	Quebec	10,666 98	16,000 00
do	Nova Scotia	17,844 19	23,000 00
do	New Brunswick	16,082 77	23,000 00
do	Prince Edward Island	3,242 25	4,000 00
do	British Columbia	4,320 53	6,000 00
do	Manitoba	3,609 03	6,000 00
Total		71,306 05	101,000 00
Fish-breeding, Newcastle hatchery		5,665 07	
do	Sandwich do	6,104 74	
do	Tadoussac do	2,505 33	
do	Gaspé do	1,846 07	
do	Magog do	1,375 32	
do	Restigouche do	3,415 59	
do	Bedford do	3,088 62	
do	Sydney do	2,775 13	
do	Miramichi do	1,896 40	
do	St. John River do	2,676 01	
do	Dunk River do	3,339 51	
do	Fraser River do	378 00	
General account.		4,430 66	
Total.		39,496 45	40,000 00

This expenditure by provinces is sub-divided as follows :—

<i>Ontario.</i>		\$ cts.	\$ cts.
Salaries of officers		9,805 72	
Disbursements of officers		5,261 13	
Miscellaneous		473 45	
Total			15,540 30
<i>Quebec.</i>			
Salaries of officers		7,490 61	
Disbursements of officers		3,008 08	
Miscellaneous		168 29	
Total			10,666 98
<i>Nova Scotia.</i>			
Salaries of officers		12,439 81	
Disbursements of officers		5,100 21	
Miscellaneous		304 17	
Total			17,844 19
<i>New Brunswick.</i>			
Salaries of officers		11,355 45	
Disbursements of officers		4,273 47	
Miscellaneous		453 85	
Total			16,082 77



Expenditure—*Concluded.*

<i>Prince Edward Island.</i>		\$	cts.	\$	cts.
Salaries of officers.....		2,782	49		
Disbursements of officers.....		395	16		
Miscellaneous.....		64	60		
Total.....				3,242	25
<i>British Columbia.</i>					
Salaries of officers.....		2,924	25		
Disbursements of officers.....		474	65		
Miscellaneous.....		921	63		
Total.....				4,320	53
<i>Manitoba.</i>					
Salaries of officers.....		1,655	00		
Disbursements of officers.....		1,301	97		
Miscellaneous.....		652	06		
Total.....				3,609	03
Total.....				71,306	05
MISCELLANEOUS.					
Legal and incidental expenses.....		1,451	93		
Canadian fisheries exhibits and Ottawa hatchery.....		1,799	35		
Expenditure in connection with the distribution of fishing bounties.....		6,009	93		
Bayview Lobster hatchery.....		4,121	07		
Total.....				13,382	28
Grand Total.....				84,688	33

## FISH-BREEDING.

<i>Newcastle Hatchery.</i>		\$	cts.	\$	cts.
Salaries.....		1,000	00		
Miscellaneous expenditure.....		4,665	07		
Total.....				5,665	07
<i>Sandwich Hatchery.</i>					
Salaries.....		900	00		
Miscellaneous expenditure.....		5,204	74		
Total.....				6,104	74
<i>Tadoussac Hatchery.</i>					
Salaries.....		1,034	00		
Miscellaneous expenditure.....		1,471	33		
Total.....				2,505	33
<i>Gaspé Hatchery.</i>					
Salaries.....		400	00		
Miscellaneous expenditure.....		1,446	07		
Total.....				1,846	07

FISH-BREEDING—*Concluded.*

		\$	cts.	\$	cts.
<i>Magog Hatchery.</i>					
Salaries.....		600	00		
Miscellaneous expenditure.....		775	32		
Total.....				1,375	32
<i>Restigouche Hatchery.</i>					
Salaries.....		1,060	00		
Miscellaneous.....		2,355	59		
Total.....				3,415	59
<i>Bedford Hatchery.</i>					
Salaries.....		1,300	00		
Miscellaneous expenditure.....		1,788	62		
Total.....				3,088	62
<i>Sydney Hatchery.</i>					
Salaries.....		860	00		
Miscellaneous expenditure.....		1,915	13		
Total.....				2,775	13
<i>Miramichi Hatchery.</i>					
Salaries.....		500	00		
Miscellaneous expenditure.....		1,396	40		
Total.....				1,896	40
<i>St. John River Hatchery.</i>					
Salaries.....		600	00		
Miscellaneous expenditure.....		2,076	01		
Total.....				2,676	01
<i>Dunk River Hatchery.</i>					
Miscellaneous expenditure.....				378	00
<i>Fraser River Hatchery.</i>					
Salaries.....		900	00		
Miscellaneous expenditure.....		2,439	51		
Total.....				3,339	51
GENERAL ACCOUNT.					
Salary of Superintendent.....		2,400	00		
Miscellaneous expenditure.....		2,030	66		
Total.....				4,430	66
Total, Fish-Breeding.....				39,496	45

STATEMENT of Fisheries Revenue paid to the credit of the Receiver General of  
Canada, for the Fiscal Year ended 30th June, 1891.

	\$ cts.	\$ cts.
Ontario—		
Rents, license fees and fines .....	26,611 70	
Quebec—		
Rents, license fees and fines .....	3,642 14	
Nova Scotia—		
Fishery licenses and fines .....	5,891 65	
New Brunswick—		
Rent, license fees and fines .....	7,233 69	
British Columbia—		
Rent, license fees and fines .....	12,914 02	
Manitoba and North-West Territories—		
Fishery licenses and fines .....	1,234 00	
Prince Edward Island—		
Fishery licenses and fines .....	667 00	
Fine imposed on U. S. Fishing Schooner "F. D. Hodgkins" .....	2,000 00	
Proceeds of sale of Speckled Trout Fry .....	1,286 50	
		61,480 70
LESS—Refunds .....		563 51
		60,917 19
Licenses to U. S. Fishing Vessels .....		9,877 23
Total .....		70,794 42

COMPARATIVE STATEMENT.

The following statement shows the expenditure and revenue of this department since its organization, in 1884. While the revenue derived from the several provinces—especially in Ontario and British Columbia—is steadily increasing, the expenditure has been kept as low as possible, consistent with the efficiency of the service. The limited amount of revenue derived from Nova Scotia and New Brunswick is due to the fact that in the above-named provinces, deep-sea fishing on which no charges are made is the principal mode of fishing; while license fees are levied only on trap nets, salmon nets and smelt bag-nets.

The expenditure under the head of "Miscellaneous" is composed of legal and incidental expenses, distribution of the fishing bounty, fisheries exhibits, &c.



## COMPARATIVE Statement of Expenditure and Revenue of the

	1884-85.		1885-86.		1886-87.	
	Expenditure	Revenue.	Expenditure	Revenue.	Expenditure	Revenue.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Ontario...	17,135 98	11,914 37	17,900 74	15,917 62	19,534 01	15,063 57
Quebec...	13,531 77	3,325 35	13,938 21	2,963 75	14,966 55	3,804 66
New Brunswick .....	14,892 87	4,650 16	15,719 36	4,078 10	16,944 87	4,417 52
Nova Scotia.....	17,503 45	2,616 28	17,852 33	2,166 53	18,092 21	1,585 28
Prince Edward Island ....	3,028 03	40 00	3,187 73	40 00	4,044 49	128 00
Manitoba and N. W. Ter..	763 00	.....	1,920 73	.....	2,468 25	5 00
British Columbia. ....	1,437 13	365 50	1,878 53	922 50	5,860 72	943 50
Fish-breeding and fishways	43,879 82	.....	44,038 80	.....	37,864 22	.....
Fisheries Protective Service	31,514 07	.....	37,613 30	.....	134,340 12	.....
Miscellaneous .....	9,529 44	.....	10,350 43	.....	11,327 77	.....
Totals..	153,215 56	22,911 66	164,400 16	26,088 50	265,443 21	25,947 53
Fishing bounties ....	155,718 98	.....	161,597 39	.....	160,903 59	.....

Fisheries Department from 1st July, 1884, to 30th June, 1891.

1887-88.		1888-89.		1889-90.		1890-91.	
Expenditure	Revenue.	Expenditure	Revenue.	Expenditure	Revenue.	Expenditure	Revenue.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
19,860 52	18,251 25	19,264 98	24,266 06	14,539 87	23,666 96	15,540 30	26,517 70
13,463 37	5,394 99	12,991 63	3,390 79	9,670 94	5,409 81	10,666 98	3,642 14
20,533 20	7,625 64	20,298 00	8,282 88	14,914 95	8,834 35	16,082 77	7,193 69
18,308 02	3,905 44	20,201 09	2,744 23	17,395 24	5,424 95	17,844 19	5,582 65
3,402 51	.....	3,746 69	140 00	3,113 21	302 88	3,242 25	667 00
2,816 64	819 25	2,848 16	848 00	2,604 70	794 00	3,609 03	1,234 00
3,661 83	6,934 55	4,333 63	6,416 00	3,634 41	11,367 50	4,320 53	12,859 02
41,082 04	.....	41,315 12	352 50	39,126 91	.....	39,496 45	1,286 50
77,102 98	.....	69,693 82	.....	64,434 66	1,176 38	83,050 16	1,934 49
13,498 56	.....	10,912 18	.....	9,313 92	.....	13,382 28	.....
213,729 67	42,931 12	205,605 30	46,440 46	178,748 81	56,976 83	207,234 94	60,917 19
163,757 92	.....	149,990 63	.....	149,999 85	.....	166,967 22	.....

## THE STAFF.

As remarked in a previous report, in many cases, fishery wardens, whose pay was but nominal, did not give the necessary attention to the protection of the fisheries in their respective divisions. A change in the system was suggested, by which instead of appointing permanent wardens at wholly inadequate salaries, temporary guardians should be employed at *per diem* allowances for the purpose of patrolling the districts during such periods of the year when their services were found to be necessary.

In one instance, where the experiment was tried, the improvement in the protection afforded was quite noticeable. This system has been gradually extended with very advantageous results.

During the year 1890, the counties of Pictou, in Nova Scotia, and Northumberland, in New Brunswick, were found with this organization; but during the current season, the plan has been considerably extended.

In the Province of Nova Scotia the following counties are now organized on this basis:—Pictou, Cape Breton, Colchester, Cumberland, Inverness, Richmond, Shelburne, Yarmouth and Victoria.

In the Province of New Brunswick:—Northumberland, Victoria and York.

In the Province of Prince Edward Island, the staff of permanent fishery wardens has been done away with and replaced by guardians who are only employed when the protection of the fish demands it. In the selection of these guardians it is intended that a large selection be made from such of the former staffs of fishery wardens whose services, location and fitness for duty entitled them to consideration.

To carry out the proposed arrangement the following circular was sent to fishery officers for the purpose of eliciting information regarding the number of guardians which it may be found necessary to employ at different times:—

INSTRUCTIONS to Inspectors of Fisheries (and to Fishery Overseers in district where no Inspector) in connection with the employment of temporary Special Fishery Guardians.

(Circular.)

DEPARTMENT OF FISHERIES,  
OTTAWA, 1st December, 1891.

SIR,—In order to afford better supervision of the fisheries service, the Minister of Marine and Fisheries directs that you will, at the earliest possible moment, supply to the department information on the following points in connection with the employment of temporary local fishery guardians, within the limits of the district under your charge:

For this purpose forms are herewith, comprising the following heads:—

1. *Localities where needed.*—This will embrace names of rivers or streams, or sections or portions thereof, by metes and bounds; lakes or coast sections, &c., and the township and county where situated; as well as the relative importance of each locality;
2. Number of guardians required in each locality;
3. Length of time required in each case to be particularly specified;
4. *Nature of work.*—Particular care should be taken to state under this heading, whether constant patrol work is required during time guardian is engaged or occasional visits of inspection, &c., and the kinds of fish to be protected or the probable nature of offences to be prevented;
5. Rate of pay recommended in each case and whether per day, month or season.

In filling up the form of estimate, keep the information required under each heading in proper line with each recommendation, so as to permit of the amounts being totalled at the bottom of the pay column, and keeping such names as may afterwards be entered



in the name column in line with the information applying to that particular name. It must also be kept in view that the estimate of guardians required, must include the different seasons of a full year.

The name column is of course reserved to be filled in after the department has dealt with the recommendations, and will form the subject of a further communication.

It is expected that each fishery officer when preparing this estimate, will use every endeavour to economize the expenditure as much as possible, consistent with efficiency of the service, and care must be taken that no more guardians are recommended for employment than are absolutely necessary, and then only for periods during which the requirements of the respective localities demand.

It must be distinctly understood, that the present circular does not necessarily imply that the assistance of guardians is actually necessary in each district, *nor is it intended that they shall be employed in districts where fishery wardens are still retained.* The department not being in possession of requisite local information, this circular is intended to elicit it. Of course, where the districts of fishery officers do not cover extensive areas, or are comparatively unimportant as breeding places, or unlikely to be visited by poachers, the overseer is expected to efficiently protect his district without other assistance.

It will be observed that reference is made under the 4th heading to the nature of work, and a distinction between patrolling and general inspection is drawn. It is believed that the knowledge possessed by each fishery officer of the local features of his district will enable him to judge whether from the inclination and number of the residents, or from some other cause, the danger of breaches of the law and regulations is sufficiently constant to call for daily patrol, at certain periods ; or whether frequent irregular visits would not suffice. In the latter case, means should be devised by which the fishery overseer in whose district and under whose supervision the guardians are employed, would be able to satisfy himself that the times of the visits of inspection are not made known to the public.

In all cases, however, the overseer of the district must keep himself constantly advised as to the manner in which his guardians are performing their respective duties and the result of their work ; dismissing them promptly when they fail in their duty and reporting at once to his superior officer, in provinces where inspectors of fisheries exist, and where not to the department at Ottawa.

In recommending the rate of pay, it is presumed that it would vary as between the different classes of guardians.

Diaries are to be supplied to all guardians, who must record therein every act in connection with their duties ; the number of miles travelled each day ; by what means, and the result of such visits ; the names of all persons found violating the law or regulations, with full particulars in each case ; giving also the action taken to discover the names of the owners of nets or other fishing appliances seized, and the disposition thereof.

These diaries are to be sent periodically, as arranged, to the officer in whose district the guardian is employed, whose duty it shall be to critically examine the same, and, if in provinces where no inspectors exist, send to this department with any remarks or suggestions he may consider necessary. In other cases, they will be sent to the inspector of fisheries for the district with the same remarks, who in turn will transmit them to the department with any observations they may appear to him to call for.

No guardian will be paid without a certificate of the officer under whom he is employed, that he has properly performed his duties ; which information will be gained by the supervising officer from irregular and repeated inspection.

Each guardian of either class must take the formal oath of office, which can be subscribed before any magistrate or the fishery overseer in whose district he is employed.

I am, Sir,

Your obedient servant,

S. P. BAUSET,

*Acting Deputy Minister of Fisheries.*

## BRITISH COLUMBIA.

Mr. John McNab, of New Westminster, was appointed, on probation, inspector of fisheries for the province of British Columbia, in place of the late Thomas Mowat.

Mr. T. S. Higginson, Crown Timber agent at New Westminster, has been authorized to act as fishery overseer without salary, in the district assigned to him as such Crown Timber agent.

## MANITOBA.

Mr. H. Martineau, of Manitoba House, was appointed a fishery overseer for Lake Manitoba, Ebb and Flow Lake, Dog Lake and streams falling thereinto.

Mr. E. T. Stevenson, Crown Timber agent at Winnipeg, has been authorized to act as fishery overseer without salary, in the district assigned to him as such Crown Timber agent.

## NORTH-WEST TERRITORIES.

Mr. F. C. Gilchrist, of Fort Qu'Appelle, fishery overseer for Qu'Appelle River and tributaries, was promoted to the position of Inspector of Fisheries for the North-West Territories.

When the question of the reorganization at the fisheries service in Manitoba and the North-West Territories was under consideration, it was deemed advisable, in order to afford more efficient protection to the fish of these regions, to extend the provisions of the Fisheries Act, which empowers customs officers and other public officials to seize and confiscate any fish caught by unlawful means, or during improper seasons, to Indian agents, Crown Timber agents, forest rangers, homestead inspectors and other Government employés, and thus obviate the necessity of employing a large staff of guardians, at considerable cost, to protect waters where no great commercial fisheries are yet carried on.

Accordingly, with the concurrence of the Honourable the Minister of the Interior and of Indian Affairs, certain officers of his department, a list of which is hereafter published, have been appointed fishery overseers, with an allowance for travelling disbursements when engaged on fisheries services; it being understood that the first duty of these officers would be to their own department. The scheme is working satisfactorily, and it is confidently expected that the presence of these officers will put a stop to the wanton destruction of fish in these provinces.

With the view of obtaining full information regarding the fisheries in the North-West Territories, Inspector Gilchrist, of Fort Qu'Appelle, was instructed by this department to enquire into, and report upon, the whole matter. After spending some two months in a personal inspection of the chief fishing centres of the Territories, he sent a very full and interesting report (see appendix) on the reorganization of this service, suggesting that the North-West Territories be divided into thirteen districts, under the control of local fishery overseers.

The fish found in these remote regions are salmon trout, rainbow and bull trout, whitefish, pike, pickerel and coarse fish. The greatest destruction of fish seems to have occurred through the use of small meshed nets and seines by half-breeds and white men; the building of traps of stones and brush weirs to obstruct the passage of fish during low water in the spring and autumn. In the district of Edmonton, Indians are reported to have caught, during the spawning time, in 1890, some 60,000 whitefish, and Inspector



Gilchrist considers that nothing but prompt and efficient measures will save these valuable fish from extinction, as he estimates the take of whitefish by Indians and white men to be about 500,000 lbs. per annum, and these fish are caught almost exclusively during the close season.

Having dealt at some length with the value of the fisheries in the Territories, Inspector Gilchrist goes on to consider the question of their preservation; and he is of opinion, that in a sparsely settled country, where the distances to be covered are so great, and the protection of the fisheries is necessarily inadequate, if Indians and half-breeds are allowed to fish in season and out of season, without restriction, the result will be fatal, as they fish almost solely during the spawning season, when they can catch a larger number of fish in the shortest time. This question is one that affects the Indians, as, with the destruction of these fisheries, their principal food supply will be lost. The kind of net generally used throughout the North-West is the gill net, and under proper restrictions this net would be the best for the country. The use of pound-nets, Mr. Gilchrist deprecates, owing to its deadly action upon whitefish and trout when they are running.

#### FISH-BREEDING.

The position of officer in charge of the Fraser River, B.C., fish hatchery having become vacant by the death of Mr. Thomas Mowat, Mr. John McNab, of New Westminster, was appointed to the vacancy.

Mr. Alfred Ogden was appointed officer in charge of the new lobster hatchery, situated at Bayview, County of Pictou, N.S.

#### THE FISHERIES PROTECTION SERVICE.

The work of this branch of the service has again been very satisfactory. The fleet was composed this year of the Government steamers "Acadia," "La Canadienne," "Stanley," and the chartered steamers "Dream" and "St. Nicholas," together with the government schooner "Vigilant" and the chartered schooner "Agnes Macdonald." For a short period in the summer the schooner "Prince Edward" was also employed.

The fleet was again under the immediate direction of Lieut. Andrew R. Gordon, R. N., commanding the SS. "Acadia."

The report of this officer which forms Part II of this report deals fully with the details of the season's operations, and contains suggestions of considerable importance which will be of interest to those directly concerned in the welfare of our deep sea fisheries.

The cost of this service for the fiscal year 1890-91 was \$83,050.16, and for the calendar year ending 31st December, 1891, \$99,831.75.

The expenditure in connection with the steam yacht "Cruiser," employed on Lake Huron, Georgian Bay, which amounts to \$5,538.59, and for which one-half (\$2,769.29) is borne by the Customs Department according to agreement, is included in the above figures.

Under command of Captain Edwin Dunn the "Cruiser" was commissioned for the protection of the fisheries of Georgian Bay and Lake Huron. She worked satisfactorily until the 1st November, when, owing to boisterous weather, it was found necessary to employ a larger ship, and the surveying steamer "Bayfield," belonging to



the Department of Marine, was loaned to this department for the work, which she satisfactorily performed during the fall close season.

The opinion expressed in previous reports that a vigorous protection of the valuable fishing industry of these waters had become an urgent necessity, is more than justified by the excellent results which have crowned this year's operations.

To properly accomplish the end in view, it is, however, admitted that the services of a larger and more powerful vessel are requisite.

Plans and specifications for a vessel of this class have been prepared, and it is the intention of the department to proceed with its construction without delay, in order that the vessel may be available for the services during the coming season.

During the past season, but one seizure of United States vessels became necessary; that of the schooner "F. D. Hodgkins," which was seized at Fox Bay, Anticosti, by the SS. "La Canadienne," for fishing within the three-mile limit.

The vessel was taken to Gaspé, and proceedings were instituted in the Admiralty Court, but on the urgent plea of the master that he was ignorant of the law, thinking they had the same right at Anticosti as at the Magdalen Islands, and that his action was not a wilful violation of the law, the vessel was released on the payment of a fine of two thousand dollars.

The Act of 1890, providing for the issue of licenses to United States fishing vessels, having expired on the 31st December of that year, and in view of the late date of the meeting of Parliament, authority was obtained from His Excellency in Council to issue *ad interim* receipts for similar privileges on the same conditions, pending legislative action in that direction; such receipts to be replaced by formal licenses on the passage of the requisite statute.

On the 10th July, 1891, an Act was assented to providing for the issue of licenses to United States fishing vessels, permitting them during the calendar year to enter ports on the Atlantic Coast of the Dominion of Canada, for the purposes of:—

- (a.) The purchase of bait, ice, seines, lines and all other supplies and outfits;
- (b.) The transhipment of catch, and the shipping of crews.

United States fishing vessels to a large extent took advantage of the renewed privilege, as shown by the following figures:—

	Vessels.	Tonnage.	Amount Collected.
1888.....	36	2,554	\$ 3,831 00
1889.....	78	6,393	9,589 50
1890.....	119	9,641	14,461 50
1891.....	98	7,399	11,098 50

The list of fishing vessels to which licenses were issued during 1891 is printed in Part II of this report.

It is noticeable that although United States vessels were enabled to obtain licenses free of charge from Newfoundland for the purpose of procuring fresh bait, and the above figures show a decrease of 21 in the number of vessels which took such licenses in 1891 as compared with 1890, there is an actual increase of 20 vessels over 1889, when the licenses issued by Newfoundland and Canada on the same terms were jointly valid in the Dominion and Newfoundland respectively.

This is evidence of the value of the above privilege to the United States vessels. These advantages have also been frankly admitted by the owners and masters of vessels

working under them. The masters of vessels who did not avail themselves of the licenses generally evinced no desire to exceed their restricted privileges ; the natural result of which has been to continue the friendly relations established between the officers of the protection fleet and the masters of United States fishing vessels.

#### FISHERIES INTELLIGENCE BUREAU. •

This service, originated in 1889, was extended in 1890, when 44 stations were in operation along the coast at different points. It has been further enlarged this year. It now comprises 52 stations from which daily reports are sent to the central office at Halifax, whence after compilation, as explained in last year's report, the information is telegraphed to the principal business centres and fishing stations in the Maritime Provinces. The benefit to be derived from this information can readily be understood, as will also be the general approval of the fishermen and fishing firms, of a service which affords such advantages.

Apart from the great assistance afforded the fishermen in enabling them to procure fresh bait, so indispensable in deep-sea fishing, there is another consideration in connection with this intelligence bureau, which places its value altogether out of proportion with the comparatively insignificant cost ; this is the information it affords to the commander of the Fisheries Protection Service, who, through the intelligence bureau, becomes possessed of a knowledge of the movements of the mackerel, which enables him to dispose the cruisers under his command along the coast in such a manner as to keep a proper supervision over the operations of the United States fishing fleet.

#### PILOTAGE REGULATIONS.

Occasion was taken last year to direct attention to the question of pilot dues exacted from fishing vessels. Lieut. Gordon again refers to this matter in his report, and a strong case is made for relieving these vessels from the payment of such local dues.

The suggestion of last year is therefore repeated, that the Pilotage Regulations be so amended as to exempt all vessels exclusively engaged in fishing, up to 250 tons—that being the limit to which the Pilotage Act, 59 Vic., Chap. 86, authorizes local authorities to exempt fishing vessels—from the payment of these dues.

#### EXPENDITURE.

Appended is a statement of the cost of the Fisheries Protection Service for the calendar year 1891.

STATEMENT of Expenditure in connection with Fisheries Protection Service for the Year  
ended 31st December, 1891.

Service.	Amount.	Total.
	\$ cts.	\$ cts.
<i>Steamer "Acadia."</i>		
Wages of officers and men.....	8,086 04	
Provisions.....	2,185 97	
Fuel.....	1,577 99	
Repairs.....	2,750 70	
Miscellaneous expenditure.....	3,533 57	
		18,134 27
<i>Steamer "La Canadienne."</i>		
Wages of officers and men.....	7,403 75	
Provisions.....	2,362 94	
Fuel.....	1,004 14	
Repairs.....	1,064 45	
Miscellaneous expenditure.....	3,308 18	
		15,143 46
<i>Steamer "Stanley."</i>		
Wages of officers and men.....	3,259 07	
Provisions.....	1,316 91	
Fuel.....	1,392 69	
Miscellaneous expenditure.....	633 63	
		6,602 30
<i>Steamer "Cruiser."</i>		
Wages of officers and men.....	3,089 24	
Provisions.....	998 98	
Fuel.....	925 60	
Repairs.....	172 20	
Miscellaneous expenditure.....	352 57	
		5,538 59
<i>Steamer "Dream."</i>		
Wages of officers and men.....	2,649 80	
Provisions.....	867 39	
Fuel.....	642 31	
Charter.....	3,300 00	
Miscellaneous expenditure.....	311 60	
		7,771 10
<i>Steamer "Constancer."</i>		
Paid on account of building vessel.....	25,000 00	
Salary of building inspector.....	979 16	
Miscellaneous expenditure.....	200 70	
		26,179 86
<i>Steamer "St. Nicholas."</i>		
Wages of officers and men.....	62 65	
Provisions.....	67 59	
Fuel.....	48 84	
Charter.....	333 34	
Miscellaneous expenditure.....	58 29	
		570 71
<i>Steamer "Bayfield."</i>		
Wages of officers and men.....	417 00	
Provisions.....	178 90	
Fuel.....	380 05	
Miscellaneous expenditure.....	52 77	
		1,028 72
<i>Schooner "Vigilant."</i>		
Wages of officers and men.....	3,355 38	
Provisions.....	1,056 89	
Repairs.....	810 47	
Miscellaneous expenditure.....	1,269 80	
		6,492 54



STATEMENT of Expenditure in connection with Fisheries Protection Service, &c.—*Con.*

Service.	Amount.	Total.
<i>Schooner "Agnes Macdonald."</i>	<i>§ cts.</i>	<i>§ cts.</i>
Wages of officers and men.....	2,121 16	
Provisions.....	724 81	
Charter.....	2,137 50	
Miscellaneous expenditure.....	493 81	
		5,477 28
Customs steam yacht "Argus," while employed on special services.....		43 70
Expenditure on account of building two new steamers.....		6,071 88
General account, miscellaneous expenditure.....		1,525 31
Fisheries intelligence bureau.....		2,021 32
Total.....		102,601 04
RECAPITULATION.		
Steamer "Acadia".....	18,134 27	
do "La Canadienne".....	15,143 46	
do "Stanley".....	6,602 30	
do "Cruiser".....	5,538 59	
do "Dream".....	7,771 10	
do "Constance".....	26,179 86	
do "St. Nicholas".....	570 71	
do "Bayfield".....	1,028 72	
Schooner "Vigilant".....	6,492 54	
do "Agnes Macdonald".....	5,477 28	
Steamer "Argus," special.....	43 70	
On account building new steamers.....	6,071 88	
General account.....	1,525 31	
Fisheries intelligence bureau.....	2,021 32	
Total.....		102,601 04
This amount will be reduced in the sum of \$2,769.29, being the share of "Cruiser" expenses paid by Customs Department.....		2,769 29
Net expenditure, Fisheries Protection Service.....		99,831 75

## PURSE SEINES.

In last year's report of this department, the subject of fishing with purse seines was very fully treated, and an exhaustive résumé of the opinions of competent authorities as to its results and effects was collated, forming a valuable appendix. The injurious effects of this mode of fishing being so strongly portrayed, and almost universally admitted, the department had no option but to conclude that the future preservation of the valuable mackerel and herring fisheries of the Atlantic coast demanded its general prohibition in our waters.

Without joint action however on the part of the Governments of the United States and France, such a prohibition cannot attain all that is desired, so long as its use is continued by the fishermen of other nations. The United States Government have, however, endeavoured to minimize the danger by preventing the landing of mackerel taken with purse seines on any part of the coast of the United States before the 1st June in each year, but as by this time most of these migratory fishes have found their way to Canadian waters, outside the territorial limits in which United States fishermen are permitted to use their purse seines with impunity and freedom from restrictions, the

prohibition in question is really not of such value as would at first appear. To be of general benefit to the fisheries, a universal prohibition is required, and international action has been sought with the view of prohibiting entirely the use of these obnoxious engines on the high seas.

In the expectation of joint action, the department considered that this mode of fishing within our own territorial waters should be prohibited, and during the last session of Parliament the Minister of Marine and Fisheries introduced the following Bill which was adopted :—

54-55 VICTORIA, CHAP. 43.

*An Act further to amend "The Fisheries Act," chapter ninety-five of the Revised Statutes.*

[Assented to 28th August, 1891.]

HER MAJESTY, by and with the advice and consent of the Senate and House of Commons of Canada, enacts as follows :—

1. Section fourteen of *The Fisheries Act* is hereby amended by adding thereto the following sub-section :

"15. The use of purse seines for the catching of fish in any of the waters of Canada is prohibited under a penalty for each offence of not less than fifty dollars, and not exceeding five hundred dollars, together with the confiscation of the vessel, boat and apparatus used in connection with such catching."

SEINE FISHING IN HALIFAX COUNTY.

In consequence of the trouble hitherto experienced with regard to seine fishing in certain localities of the county of Halifax, and endless disputes and quarrels which prevailed among the fishermen, this department caused enquiries to be made through its officers as to the best modes of regulating the fisheries in the neighbourhood of Peggy's Cove, for the purpose of ensuring better protection to the fish and greater security to fishermen of this locality. As the result of these enquiries, it became evident that the only safe way to secure the desired end was to adopt the license system so successfully enforced in other parts of the Dominion, and as this suggestion was approved by a majority of the fishermen of the locality, the following fishery regulation was adopted :—

REGULATIONS FOR THE SEINE FISHERY OF PEGGY'S COVE DISTRICT, COUNTY OF HALIFAX, NOVA SCOTIA.

(1.) The Governor General in Council may declare the coast waters of Peggy's Cove, within one-half mile of the coast, between any two given points, to be a seining district, and thereupon it shall be unlawful for any person to fish in the manner known as seine fishing within said district, without a special license from the Department of Fisheries.

(2.) Seine districts may be subdivided and fishing berths set off by metes and bounds, and named or numbered.

(3.) Licenses of the first order may be issued to the owner or owners of a seine measuring not less than 80 fathoms in length and 8 fathoms in depth, if the owners thereof are provided with a boat and sufficient crew to work the seine. Provided always that the owners or one of them has his domicile within ten miles of the coast between the points set off into a district, or provided the owners or one of them is the owner or owners of real estate of the value of one hundred and fifty dollars within the prescribed limits.

(4.) Between the 15th day of May and the 15th day of November in each year no nets or any other fishing apparatus or contrivance shall be anchored or set within such seining district.

Provided always, that if no mackerel are being taken within such district, or the adjoining district, the local fishery officer may grant a general permit from day to day to set nets within the prescribed limits; and such officer shall have power to cancel such permit by public notice posted within the district in three different places, if mackerel appear on the coast, and to cause the removal of nets which may be set two hours after the publication of such notice, the owners to pay the cost of removal.

(5.) The permit to set nets shall apply to the owners of any nets, whether they have licenses to fish with seines or not.

(6.) No one shall sail or row a boat through or over a seine set within the limits of a berth.

(7.) No one shall disturb the waters within the limits of a berth so as to frighten fish from any portion thereof.

#### LICENSES.

(8.) A license shall entitle the holder to fish within the berth for which it is issued, in the manner known as seine fishing, until the holder has caught within such berth twenty barrels of mackerel, or twenty-five barrels of mackerel and herring; and the license shall thereupon determine. But such fishing shall only be carried on from the first day of May until the fifteenth day of July, and from the first day of August until the fifteenth day of November, in each year.

(9.) Berth licenses shall be numbered, the holder of license No. 1 to be entitled to the first fishing privilege within the limits of the berth named in his license.

(10.) The holder of the license next in number shall be entitled to shoot a seine at the rounded-in-arm of the seine owned by the holder of the license whose number immediately precedes his, and to the rights of fishery in the berth when the preceding license determines.

(11.) One hour after sunrise, and in the absence without lawful excuse of a license holder having first right to shoot a seine, the next licensee in order present may shoot his seine in the berth and be entitled to all the fish he may catch in that shot, from one hour after sunrise to sunset, not to exceed, however, 20 barrels of mackerel, or 30 barrels of herring.

(12.) One hour after sunrise, in the absence of any license holder in a berth, any other seine owner may shoot a seine; the first owner throwing anchor and fastening his seine line to a stake, and having sufficient crew to work the same, shall have preference in the berth, and the next in order throwing anchor and fastening his seine line to a stake may shoot his seine from the rounded-in-arm of the first.

(13.) It shall be held to be a lawful excuse if a license holder is absent from his berth because of stormy weather, or by reason of his crew being unable to pursue their usual avocation through sickness, or because the holder is attending a funeral of kinsfolk, or friend, or if he was engaged necessarily drying his seine.

(14.) Licenses shall be issued and allotted to persons entitled thereto in the order and for the berth named at a meeting of seine owners to be called by the local fishery officer for the purpose, on the first Tuesday of April and the last Saturday of July, in each year, due notice of such meeting being given.

(15.) The holder of an unexhausted license shall be entitled to all the fish taken in the last shot of the seine, notwithstanding that the quantity of the fish caught may be in excess of that required to exhaust the license.

(16.) The fee on each license shall be fifty cents.

#### DISTRICT.

The above district shall be considered to be divided for seine fishing purposes into the following berths:—

*No. 1. Ball Rock Berth.*—From Middle Point to Ball Rock.



- No. 2. *Black Rock Berth*.—From Ball Rock to Black Rock.  
 No. 3. *Salmon Cove Berth*.—From Black Rock to and including Salmon Cove.  
 No. 4. *Point Berth*.—From Salmon Cove to Peggy's Point.  
 No. 5. *Pollock's Cove Berth*.—From Shark Rock to Pollock's Cove.  
 No. 6. *Passage Berth*.—From Shark Rock to Pollock's Cove Rock.  
 No. 7. *Swab Rock Berth*.—From Pollock's Cove Rock to Swab Rock.  
 No. 8. *Round Rock Berth*.—From Swab Rock berth to Round Rock.  
 No. 9. *Simond's Rock Berth*.—From Round Rock to Simond's Rock.  
 No. 10. *Clam Pond Berth*.—From Simond's Rock to Clam Pond.  
 No. 11. *Gap Berth*.—From Clam Point to Gap Point.  
 No. 12. *Five Alley Berth*.—From Gap Point to Five Alley Rock.

The Committee advise that a Commission do issue accordingly.

JOHN J. MCGEE,

*Clerk of the Privy Council.*

### THE LOBSTER FISHERY.

The enormous increase in the annual catch of this important industry more than ever convinces this Department that unless stringent measures are adopted to ensure its protection it will be unable to bear the heavy drain put upon it.

Ten years ago, two or three lobsters were sufficient to fill a one pound can ; now, it takes six or seven, or more. The number of factories has kept pace with the increase in the number of men, boats and traps used, while the number and size of the lobsters has correspondingly diminished. There may be some fluctuation in the supply of certain localities from time to time, and a year of scarcity may be followed by one of comparative abundance ; but the fact, nevertheless, remains, that the industry is too much taxed for its productive power and that it cannot very long stand this heavy drain.

The Canadian lobster is of great value to the country. The total number of these shell-fish preserved in cans or sold alive during the season of 1890 amounted to 11,566,732 pounds in weight, representing a value of \$1,648,344, and giving employment to thousands of persons during two months and a-half of the year. The estimated value of lobster factories and lobster traps is computed at \$822,903.

While the number of factories is yearly increasing the size of the lobsters has been correspondingly decreasing, and unless a check be provided, a valuable industry which, if intelligently nursed and efficiently protected, might be made to yield profitable returns for future generations, will be lost to Canada. Experience has proved that, unless protected by stringent regulations, lobsters could easily be exterminated. By over-fishing or by taking immature fish that have never spawned, any given locality can be speedily depleted and ruined as a lobster ground.

There may be room for diversity of views as to the present condition and prospects of the great sea-fisheries ; but in regard to the valuable lobster fishery, which occupies such a high place in the piscine wealth of the Maritime Provinces, there can be no doubt that this fishery is at present overdone, and, as a result, gradually but surely diminishing.

The annual reports of the Inspectors of Fisheries of England and Scotland show that while in some localities of Great Britain the decrease has been great enough to change the standing of this fishery, and render its pursuit unprofitable to the fishermen, the price of lobsters exported from Norway has more than doubled since 1866 ; thus showing how much the drain is being felt, although the lobster fishing grounds of Norway are known to be the largest and best in Europe.

In the United States, many grounds, where large and remunerative fisheries used to be carried on, are now completely fished out. Others are giving much decreased supplies, and the lobsters taken are of a smaller size than formerly. This decrease has been most marked in such regions as have been fished the longest, and especially in the shallow water areas near the coast, which are easy of access and which have been subjected to increased drains. The greatest decrease has occurred within the past fifteen or twenty years, or since the establishment of numerous factories and the perfected methods of transporting fresh lobsters to all parts of the country.

Viewing these facts with alarm, the Minister deemed it advisable to have the following Fishery Regulations drafted for consideration, as forming a basis for a scheme to secure permanency to so valuable an interest and source of wealth to Canadian fishermen.

#### DRAFT OF PROPOSED REGULATIONS FOR THE LOBSTER FISHERY.

1. No one shall fish for, catch, kill, can, preserve, or cure lobsters, or keep them alive in ponds, or other places, except under license from the Minister of Marine and Fisheries.

2.—(a) No trap, boat, net or other device for taking lobsters shall be used, until the owner or owners thereof have caused an application in writing, setting forth the number and description of such boats, traps or nets or other devices, to be filed with the nearest fishery office, who, if no valid objection exists, may, with the approval of the Minister of Marine and Fisheries, issue a license, in the form appended to this regulation, marked A, which shall be countersigned by the inspector of fisheries for the district.

(b) Any boat, trap, net or other device for taking lobsters, used before such license has been obtained, and every boat, trap, net or other device for taking lobsters used in excess of the number permitted by the license, or not according to the description contained in such license, shall be deemed illegal, and shall be liable to seizure and forfeiture, together with the lobsters caught therein; and the owner or owners, or person or persons, using the same, shall also be liable to the penalties and costs provided by the Fisheries Act.

3. All boats, traps, or trawl-buoys, and all "cars" used for the purpose of keeping lobsters alive, shall have the names, initials or mark of the owner or owners legibly marked or branded thereon, and such name, initials or mark shall be recorded in the license. Any boat, trap, trawl-buoy or "cars" used without such names, initials or marks, shall be deemed to have been used without a license and shall be liable to seizure and forfeiture, together with the lobsters caught therein, and the owner or owners, or person or persons, using the same shall also be liable to the penalties and costs provided by the Fisheries Act.

4. A fee of one cent shall be levied on each trap, or other device used for catching lobsters, which fee shall be paid when the application for a license is made.

5.—(a) On that part of the coast of the Atlantic Ocean extending from Cranberry lighthouse, off Cape Canso, westward, and following the coast line of the Bay of Fundy to the United States boundary line, it shall be unlawful to fish for, catch, kill, buy, sell or have in possession (without lawful excuse) any lobster or lobsters between the 1st day of July and the 31st day of December in each year, both days inclusive.

(b) In the waters of the Province of Quebec (including Magdalen Islands and Anticosti), the waters of Prince Edward Island, the remaining waters of the Province of New Brunswick, and the remaining waters of the Province of Nova Scotia, not already included in paragraph 5 of the present regulations, it shall be unlawful to fish for, catch, kill or have in possession (without lawful excuse) any lobster or lobsters between the 15th day of July and the 31st day of December in each year, both days inclusive.



(c) Any lobsters caught in violation of this regulation shall be liable to seizure and forfeiture, together with the boats, traps, nets or other devices used for the taking of the same, and the person or persons violating this regulation shall be liable to the penalties and cost provided by the Fisheries Act.

6.—(a) It shall be unlawful at any time to fish for, catch, kill, buy, sell, expose for sale, or have in possession any berried or soft-shell lobster or lobsters, or any lobster of lobsters under *nine inches* in length, measuring from head to tail, exclusive of claws or feelers, and when caught in fishing apparatus in legal use they shall be liberated alive by the proprietor, owner or agent, tenant, occupier, partner or person actually in charge, either as occupant or servant, on each of whom shall devolve the proof of such actual liberation, and each of whom, upon any violation of this regulation, shall be deemed to be jointly and severally liable to the penalties and costs provided by the Fisheries Act.

(b) Provided always that the above regulation shall not apply to berried lobsters delivered at a cannery, whose owner or manager operates, to the satisfaction of the Minister of Marine and Fisheries, incubators or boxes for the hatching out of the eggs removed from each female lobster received at such cannery.

7. Upon each case of canned lobsters, there shall be securely and conspicuously affixed, by the packer or exporter, a printed label supplied by the department of Fisheries, and signed by a fishery officer, stating that such lobsters have been legally caught and packed; and all cases not so labelled shall be liable to seizure and forfeiture, and the owner, packer and exporter of any such case shall be liable to the penalties and costs provided by the Fisheries Act.

8. All traps, boxes or cages used for the purpose of taking lobsters shall have the laths or slats one inch and a quarter ( $1\frac{1}{4}$ ) apart, so as to allow of the escape of small lobsters. And any trap, box or cage not made in accordance with this regulation shall be liable to seizure and forfeiture, together with any lobsters caught therein, and the owner or owners, and person or persons using the same, shall be liable to the penalties and costs provided by the Fisheries Act.

With the view of eliciting suggestions and criticisms, the above proposed regulations were circulated among lobster packers, and other parties interested in the preservation of the lobster fishery, with the following result :—

#### NOVA SCOTIA.

Messrs. J. B. Hamblen & Co., of Pictou, state that they are in favour of a license system. They expect packers will be protected by the licenses as well as individual fishermen. On the north side of Nova Scotia, in New Brunswick and Prince Edward Island, packers own all the fishing gear. They do not favour the branding of traps with owner's initials. They advocate a specific license fee of, say, \$50. The  $1\frac{1}{4}$  inch space for traps is about correct; but as traps are not of uniform make, exact measurement could not be adhered to. Of late, several small concerns have operated within what the Messrs. Hamblen consider as their limits, producing, they allege, an inferior article.

Mr. J. H. Townsend, of Tangier, states that he is not personally interested in this business, beyond its preservation for the benefit of the people where he now resides. He favours the license system; but the canners or packers, not the fishermen, should take out the licenses. Proper supervision should be maintained at every factory or group of factories, and after a certain number of infractions of the laws, the license should be cancelled. A scale of additional fees should be paid by the canners at the end of the season, based upon the amount of business done. Mr. Townsend claims that if honest packers refused to purchase a fisherman's catch because it contained a few small or illegal lobsters, the latter would transfer his dealings to some less scrupulous canner. This could be obviated, had the fisherman reason to fear meeting an overseer at any



time he supplies a cannery. The shipping of live lobsters should only be carried on by licensed vendors. Vessels carrying live lobsters should not be cleared at Customs, unless provided with a certificate from a fishery officer, stating by whom the lobsters are exported, &c.

Messrs. Burnham & Morrill, of Portland, Maine, who are engaged in lobster packing in Nova Scotia, favour the adoption of the regulations, excepting the last paragraph. Most of their traps being made, they think it would be a hardship to enforce that regulation before 1893, as some of these may have slats less than  $1\frac{1}{4}$  inches apart. They are opposed to any extension of fishing time. A strict enforcement of the close season would ensure the preservation of this shell fishery. They have noticed a steady increase in the size, as well as in the numbers, of the lobsters, wherever the close time was enforced.

Messrs. E. G. & C. Stayner, of Halifax, consider the proposed regulation a wise measure, likely to work well and to the advantage of the fishery. They favour a space of  $1\frac{3}{8}$  inches between the slats. Fishermen may object to the fee on each trap. Fishermen packing their own catch produce an inferior grade, and thereby injure the trade and the market.

Mr. J. N. Gardner, of Yarmouth, states that in the western part of Nova Scotia fishermen own the fishing apparatus, and it would be a hardship to impose a fee on them and not upon the packers or buyers. In clause *b*, par. 5, he recommends inserting "preserved unless with special license," instead of "without lawful excuse," as the latter gives too much scope. The other clauses he approves for the present, but thinks in the near future it will be found necessary to raise the minimum size to  $10\frac{1}{2}$  inches. This, in his opinion, would be the best means of preserving the lobster industry. It was noticed that 8,000 out of 10,000 lobsters impounded were covered with spawn, which was not shed until September and October. This is later than usual. The catch was larger last year than ever before in Yarmouth and Shelburne.

Mr. Henry T. D'Entremont, of Lower East Pubnico, reports the proposed regulations as acceptable to their fishermen, with the exception of the time allowed for fishing. He recommends the privilege of fall fishing, as they mostly ship alive to American markets, and suggests that fishing be allowed from 1st March to 15th May, and then, from August until October. The lobsters are then in their best condition and command the highest prices. Lobsters get soft-shelled in May and June; and during August, September and October they are nearly all hard-shelled.

Mr. H. B. Cann, of Yarmouth, is opposed to the license system, and foresees nothing in it but discontent and annoyance to the fishermen and trouble for the officers. The four first sections he disapproves, while he favours the adoption of the remainder. Has been in the lobster business, both packing and shipping alive, for the last ten years. Has no serious objections to the law as it now stands, except that fishery officers are clothed with too arbitrary powers in imposing penalties for the possession of undersized fish.

Messrs. Hogg, Craig & Co., of Pictou, approve of the first section of proposed regulations. Section 2 would be troublesome to packers as well as to the fishermen. In several cases fishermen supply their own boats, etc., and frequently reach the factory only a day or two before business begins. It would be difficult to include these in the applications for license. Section 2 (*b*) is considered unnecessary and difficult to keep, as

boats and traps are often destroyed during the season and have to be replaced. This would necessitate new descriptions being included in the license. Section 3 is also objectionable. Section 4 would be difficult to carry out, as in some cases the packers own the traps and loan them to the fishermen. It would, moreover, require an army of officers to collect this fee. Section 5 (*a, b, c*) is satisfactory. Section 6, if strictly enforced, every factory would have to close; some latitude should be allowed to the packers. Section 7 is considered a nuisance to the packers, and may cause serious delay in effecting a shipment to foreign markets. Section 8 could not be enforced within four or five years without causing the total destruction of all traps now built. As conditions vary according to location, certain regulations might be desirable in one locality and objectionable in another. If lobsters are found to be decreasing, the present fishing season should be shortened; and, after a fair trial, if found still insufficient, shorten it a few days more. Make the close season statutory, so that no extension can be granted. Let the license fees be from \$50 to \$100 on every factory, and refuse licenses to newcomers within three miles of an existing factory. During the close season small cutters or patrol boats could cruise along the coast, destroying all illegal traps found in the water. Heavy fines should be imposed, when convictions are secured. Seize canned lobsters where suspicion of illegality exists.

Mr. H. F. Baker, of Ingonish, fully concurs with the recommendations contained in the proposed regulations, except that he considers that the time allowed for fishing is not well adapted to Cape Breton. He would willingly pay a license fee of \$50. This amount might check the erection of small factories. If too large it might lead to monopoly. Overfishing, in his opinion, is more injurious to this industry than the catching of small or berried lobsters. The poaching canner, who seeks remote districts to hide his tin pot or boiler, is a difficult evil to cope with.

#### NEW BRUNSWICK.

Mr. H. O'Leary, of Richibucto, finds nothing to condemn in the proposed regulations. He suggests that boats fishing in deep water, say over three miles from the shore, be exempted. This would encourage deep-sea fishing. Last year he experimented in that direction, his fishermen going five or six miles out and capturing better and larger fish, with no soft or berried lobsters among them. Under no circumstances should any extension of time be granted after the 15th July.

Messrs. Robertson & Co., of Richibucto, approve of the new regulations, but hope that old cannery will have a preference over new applicants for the grounds fished by them in previous years. Should the regulation of  $1\frac{1}{4}$  inch space between slats come into force before next season, they ask to be allowed for one year more to use the traps which might come under the mark. They are opposed to any extension of time.

Mr. John Windsor, of Petit Rocher, objects to the proposed regulations. Licenses should be granted to packers for a certain extent of coast, irrespective of the number of traps he may intend using. The branding of boats and gear with owner's name is considered unnecessary and expensive. The labelling of each case of canned lobsters will occasion further embarrassment and useless expense to an already precarious industry.

Mr. A. W. Y. DesBrisay, of Petit Rocher, says that lobsters are never molested in Baie des Chaleurs after the close season begins. This should be deemed sufficient protection. This crustacean is now more plentiful and of larger size than before. The



only hope of a good business rests with the chance of an early season. It would be a good thing to regulate the space between laths. The establishment of new factories should be discouraged.

Mr. Joseph Poirier, of Grand Anse, expresses his approval of all the proposed regulations, and says he is willing to pay a license fee to secure the grounds now fished by him. He supplies his fishermen with fishing gear, and pays them so much per pound for the lobsters supplied.

PRINCE EDWARD ISLAND.

Mr. Geo. D. Longworth, of Charlottetown, is not prepared to answer fully just now. He, however, strongly urges the prohibition of new canneries within the limits of packers already in the business.

Mr. Archibald J. Macdonald, of Georgetown, considers that parties permanently engaged in the business will be benefited by the license system. Collectors of Customs should be authorized to issue licenses, which could be countersigned by fishery officers on their first visit to the factory. The only feasible penalty would be to cancel the license and close the factory. Parties fishing illegally usually keep their buoys under water and trust to other marks to locate them. It will be hard to discover these violations. If the incubators are properly looked after, and all the ova saved, more real good will be achieved in one year than in all the past years. Packers refusing to attend to this part of their duty should have their license cancelled. The close season should be from 1st July to 1st May, but the size limit should not be enforced during the fishing season. The  $1\frac{1}{4}$ -inch regulation would condemn all traps in the Gulf. It might be all right on the Atlantic coast and Newfoundland, but in the Gulf 1 inch or  $1\frac{1}{8}$  inch is all that is required.

Messrs. Robblee & Co., of Miminegash, do not consider that the proposed regulations will fill the bill. What is wanted for Prince Edward Island is to commence fishing as soon as possible after the 1st of May and close on 30th June, without exception. They have come to the conclusion that if they do not get the lobsters one year they will get them the next; and allowing them 46 weeks of protection in one year would be money in their pockets. They are strongly opposed to a division of limits by licenses, as American firms would soon hold all the waters of their coast.

Mr. J. Hantz, of Pinette, remarks: Why collect a license fee from lobster fishermen, when you pay a bounty to other fishermen, who do not run greater risks nor bear less expenses than the former? The close season suits that locality, unless spring is very late. The proposed label is unnecessary where there is a fishery officer. The proposed space between the slats is objectionable, on the ground that they are not put close to prevent young ones from getting out, but to save the claws of the larger ones, which, if they got through, would be broken off in getting the trap into the boat.

Mr. J. H. Myrick, of Tignish, favours the license system, if present occupants are to be protected on their grounds. Sections 2 and 3 will not sufficiently benefit anyone to compensate for the trouble of complying with their requirements. The fee is reasonable. The close season, if well enforced, will furnish the best protection, not only to the fish, but to the packers and fishermen. Section 6, relative to small lobsters, is objectionable, because its observance has always been found most difficult. Fishermen throw back a good many small lobsters, but to return all that come under 9 inches is practically impossible. The clause respecting labels on cases of canned lobsters will be



found more cumbersome than beneficial. If sufficient notice is given, section 8 will be a good measure and productive of beneficial results.

#### QUEBEC.

Mr. L. Z. Joncas, M. P., heartily approves of the regulations and believes in a strict protection for this industry. He, however, makes the following suggestion : That the license be taken by the packer and not by the fisherman, and that the fee of one cent be paid by the packer or owner of the factory. This would bring the same result and occasion a great deal less trouble.

Dr. Wm. Wakeham, inspector of fisheries for the Gulf division, approves of these regulations. He suggests that the words, "for the purpose of canning or export" be inserted after the words, "or other places," in the 1st paragraph. As it reads at present, private individuals fishing a single trap for domestic consumption, or tourists amusing themselves on the sea coast by gaffing lobsters among the rocks, would require a license. Lobster fishing should be prohibited in the lagoons of Magdalen Islands, as it is an established fact that lobsters frequent these shallow and warm waters for the purpose of spawning. The majority of canners and fishermen are in favour of stopping the lagoon fishing, and it is recommended that a clause to that effect be inserted in the present regulations.

#### SHIPMENT OF LIVE LOBSTERS TO ENGLAND.

The department being anxious to encourage by all reasonable means any new enterprise having for its object the improvement of the fishing industry, could not but take a lively interest in Captain Arthur McGray's attempts to ship lobsters alive to the English markets.

As early as 1890 Captain McGray advised this department that he believed he had perfected a system of handling lobsters which would permit of their being shipped alive long distances, and he asked permission to catch a few of them for the purpose of testing the practicability of his scheme. The required permission was readily granted, and after the necessary enquiries had been made, the department deemed the scheme worthy of support, and intended asking Parliament for an appropriation of \$300 for the purpose of assisting Captain McGray in his trial shipments to England. This intention was not, however, carried out, and a further attempt to test the feasibility of Captain McGray's scheme was consequently delayed for the time being. However, through the offices and co-operation of the High Commissioner for Canada, and of some of the largest fish dealers at Billingsgate, arrangements were made for the exhibition and sale at their stalls of the lobsters sent over in the trial shipments.

Owing to a succession of unfortunate accidents, the venture did not prove quite as satisfactory as could be wished for. The practicability of transporting lobsters alive from this country to England has, however, been demonstrated, and with the acquired knowledge of the causes of failure and the means of overcoming them in future, there is no reason to doubt but that a lucrative trade can be established with England, to the great advantage and profit of the fishermen of our Maritime Provinces.

The following article from the *Canadian Gazette*, of London, contains details of Captain McGray's experiment :—

#### IMPORTING LIVE CANADIAN LOBSTERS.

"The Canadian lobster has long been well known and appreciated in England, but only in its *preserved* state, packed in the tins familiar to all housekeepers. A success-

ful attempt has just been made to import *live* lobsters from Canada, where they are abundant and cheap, to England, where they are so dear as to render them a positive luxury.

“ Many attempts have been made at different times to land live Canadian lobsters in England ; but none of them had proved successful, owing to various causes too numerous to explain here. The idea was, however, too good, too tempting, to be definitely abandoned, and experiments were constantly being made, though with but little success. Finally Messrs. Arthur and Harold McGray instituted careful inquiries in the principal lobster districts, the result of which led them to the conclusion that the methods adopted by previous shippers had been defective, owing to their ignorance of the habits and requirements of the lobster. These shippers had simply placed the fish in large tubs, renewing the salt water at frequent intervals. This was clearly insufficient, for the lobsters invariably died within twelve or fifteen hours.

“ Having concluded their inquiries and carefully tabulated the information they had obtained, Messrs. McGray commenced to experiment with a system entirely different, devised by themselves. This improved apparatus, which appears simple in itself, is the outcome of patient observation and study of the habits of the lobster at various points along the coast. It enables the crustaceans to continue, whilst in transport, an almost identical mode of life to that led by them at the bottom of the sea. This system constituted the inventor’s secret, which we cannot of course divulge at the present moment.

“ They commenced with ten lobsters, which they placed in their improved receptacle, and contrived to keep them alive for forty-eight hours. This was a decided improvement on the results previously obtained by other merchants. Thus encouraged, they continued their experiments with successive series of lobsters. In the course of the summer of 1891 they succeeded in keeping them alive five, eight, eleven, thirteen, and ultimately eighteen days. These experiments, diversified by innumerable incidents, trials, failures, and partial successes, were conducted on board a light-ship stationed off Barrington, with water always taken from the bay, and naturally of about the same temperature. An important point was thus established—lobsters could be kept alive for eighteen days on board a stationary ship.

“ The question then arose, Would similar lobsters live the same length of time on board a ship crossing the Atlantic, and in water constantly changing in temperature ? Messrs. McGray were quite convinced that they would.

“ They, therefore, arranged to ship fifty lobsters, by the SS. *Historian* (Captain Wilson), running from Halifax, Nova Scotia, to London direct. The passage was expected to occupy fourteen days. This was more than sufficient to thoroughly test the system, seeing that steamers are available which make the passage in ten days.

“ The ship left Halifax at 8 a. m. on Thursday, 10th December, Mr. Harold McGray being on board to personally conduct the experiments. The lobsters were shipped under rather unfavourable circumstances, they having then been out of water for twenty-four hours.

“ The losses during the voyage were as follows :—

1st day	2 lobsters died.
5th “	4 “ “
6th “	1 “ “
7th “	3 “ “
8th “	1 “ “
9th “	1 “ “
12th “	2 “ “

“ The fifth day a receptacle containing fifteen lobsters was swept overboard during a south-west hurricane.

“ The first two deaths were due to the unsatisfactory condition of the fish when shipped ; the next four were killed by the rapid change in temperature during the passage across the Gulf stream ; two died from injuries inflicted by larger and stronger ones, whilst the remainder died from some unknown cause.



"On leaving Halifax the temperature of the water was 44°, and this was maintained for four days. On the banks of Newfoundland it varied from 45° to 48°, whilst, on arriving in the Gulf stream, it suddenly rose to 65°. Mr. McGray was naturally anxious to ascertain the effect produced on the crustaceans by this rapid rise in temperature. Four of them succumbed, as we have said; but the rest remained in good condition.

"Strange to say, the cold air and the warm water exercise an equally fatal effect on these delicate fish, accustomed to live in depths where the air never penetrates, and where the water never rises above a certain temperature. Another curious point was that they travelled the entire distance—2,800 miles—without requiring anything in the shape of food. When at the bottom of the ocean they eat fish, and when brought to the surface to be kept for a certain time they can be fed on oatmeal. They would, of course, eat fish, but it has been found that they fight for this food like hungry wolves, biting and seriously injuring one another. To avoid all possible risk, Mr. McGray decided to give them nothing to eat, and found that they still remained in good condition.

"Up to the time of the arrival of the shipment in the Victoria docks, at noon on 26th December, everything had come up to the expectations of the exporters. Unfortunately, however, they reached London just at the time when, owing to the Christmas holidays, the markets were closed for three days. They had consequently to be kept on the ship for nearly two days—until the morning of Monday, 28th December—and the water in the dock had to be used in the endeavour to keep them alive. That dock water, helped by the fog, killed all but four. It will, however, be admitted that these quite exceptional circumstances do not detract from the value of the experiment, as showing that live lobsters can be brought to this country in a marketable state, and Mr. McGray is confident from the experience he has gained that the next shipment will establish beyond doubt the feasibility of a successful and profitable trade.

"The practicability of the transport of live lobsters having been thus far demonstrated, the promoters will later on arrange for the acquisition of a 15-knot boat specially fitted with the necessary apparatus for the conveyance of live lobsters in large quantities across the Atlantic. This will enable them to supply the markets of London and Paris with first-class lobsters delivered *alive* in those cities, at less than half the price now paid for English lobsters of equal quality. The first shipment will probably take place about the middle of May next.

"The lobster fisheries in Canada last from January to July, the rest of the year forming a *close* season, rigorously enforced, during which no lobsters can be taken. In order to obtain the lobsters required for their experiments, the promoters were obliged to request permission to fish for them from the Hon. C. H. Tupper, the Canadian Minister of Marine and Fisheries. This exceptional favour was readily granted by the Dominion Government, in the hope that these experiments would ultimately lead to the establishment of another new and profitable industry between Canada and the mother country. The practically successful result just obtained warrants the hope that these expectations will be fully realized.

"Mr. McGray is now in London, and will return to Halifax in a few days to complete arrangements and secure patents."

#### OYSTERS.

Last year's report contained a very full article on the measures which it was proposed to adopt for the preservation and improvement of this valuable industry, and included a *résumé* of regulations for the formation and cultivation, under proper restrictions, of oyster beds. Since then, considerable progress has been made in this direction, and a system of reserving areas for the restoration of public beds, and licensing limited sections of ground to private applicants, for the purpose of encouraging natural and artificial cultivation, is now in full operation.



At a conference of the fishery inspectors, held at Ottawa, during the month of April, 1891, the existing state of the oyster fishing industry of the Dominion, and the best means of securing its expansion and improvement, was fully discussed, with the result that the following recommendations were made :—

(1.) That no fee be charged for licenses.

(2.) No one shall fish for, catch, or have in possession, any oysters the product of the Dominion of Canada, between the 1st day of May and the 30th day of September in each year, both days inclusive, and that in all partially depleted beds no fishing in the winter season through the ice be allowed; the several inspectors to furnish the department with a list of such beds, and the department to make the necessary regulations for such prohibition.

(3.) No one shall fish for, catch, or possess any "round" oysters under 2 inches in diameter of shell, nor "long" oysters under 3 inches of outer shell. All oysters taken under these dimensions to be immediately restored to the water, under penalty of fine and forfeiture of all materials, implements, or appliances used, and the cancellation of the license.

(4.) That all productive oysters beds now in existence in the waters of Canada be divided with as little delay as possible into three sections, which sections shall only be fished alternately, one section in each year, under the control of the local fishery officers, upon some general plan prepared by the department.

(5.) The committee recommend that the department take the necessary measures to re-stock as many of the exhausted beds as possible, and that leases or licenses for a term of years be granted to parties willing to cultivate oysters, where no productive beds now exist, upon such conditions as the department may deem best.

(6.) Also, that mud-digging be prohibited within 200 yards of any live oyster bed; then only at such place, or places, as may be prescribed by a fishery officer.

#### APPEAL TO THE PUBLIC.

It is a well known fact that a great many localities in the Maritime Provinces which were, at one time, noted for the quality of their oysters as well as for the fertility of the beds from which these molluscs were taken, have of late years become greatly depleted, and in some cases quite exhausted, owing chiefly to reckless and inordinate modes of fishing and the utter absence of any artificial aid in the propagation of the species, or care in the protection and cultivation of the grounds to which they were indigenous.

Finding, from enquiry, that considerable satisfaction was manifested among residents of localities where exhausted oyster beds were to be found at the action taken by the department, and that a general appreciation existed as to the necessity of closing them against fishing for a number of years, for the purpose of giving them time to recuperate, the following form of petition was circulated in order to strengthen the hands of the department :—

"To His Excellency

The Right Honourable Sir FREDERICK ARTHUR STANLEY, &c., &c.,  
Governor General of Canada.

"Your petitioners having learned that Parliament has made an appropriation to meet the expenses in connection with the survey of oyster beds, beg to set forth :

"There once existed in this locality, viz., extensive oyster beds, the working of which not only furnished employment to many, but also proved an export of considerable value, but from over-fishing and other causes the yield of the beds referred to has, for some years past, being falling off, till at the present time they are, if not wholly so, to a large extent unproductive.

"Your petitioners believe that the re-stocking of these beds can be successfully accomplished, and that under restrictive regulations the productiveness of the oyster fishery may within a few years be restored.

"Your petitioners would further state that in the event of any of the oyster areas in their respective localities being selected for the operations of the department, they would approve of all oyster fishing in such localities being prohibited for a term of years.

"Your petitioners would further desire that upon the expiry of the term of years for which, under the provisions of the Fisheries Act, beds may be set apart for the purposes of culture, that the raking or fishing of the product of these beds should be permitted only under judicious and restrictive regulations necessary for their enforcement and preservation.

"Your petitioners therefore humbly pray that the locality of \_\_\_\_\_ may be surveyed and set apart with the above object in view."

#### ANSWERS.

In response to this appeal, petitions were received praying for the setting apart, survey, and re-stocking of the following waters—

Shediac harbour, Baie Verte and Tidnish, in the Province of New Brunswick.

Eastern harbour, Cheticamp; Fader's Pond, on the south side of St. Ann's Bay; Sydney River, Lingan Bay, Mira Bay, Catalone Bay, East Bay, and Big Glace Bay, in the Province of Nova Scotia.

Summerside harbour, Orwell Bay, Enmore West, and Winter Rivers, in the Province of Prince Edward Island.

#### ACTION.

An appropriation of \$5,000 having been voted by Parliament during the past session for the survey of oyster beds, and for the purpose of assisting in the planting and formation of new ones, Mr. Robert Simpson, C.E., was instructed to survey Shediac harbour, which was formerly held in high repute for the excellent quality of its oysters, but whose beds, owing to excessive and improvident raking, had become practically extinct. A Minute of Council based upon such survey was adopted on the 1st September, 1891, setting apart about 270 acres of water area in the above named locality, for the purpose of carrying on natural and artificial re-production of oysters, and authorizing the Minister of Marine and Fisheries to incur the necessary expenditure in connection with such operations.

It was fully expected that these operations could have been inaugurated during the same fall; but so much difficulty has been experienced in securing the services of a reliable expert that the experiments had to be postponed until the spring of 1892. This unavoidable delay may, after all, prove beneficial. While several authorities—especially European—contend that the fall is the proper time for planting, many others—and especially Americans—favour the spring months, as allowing time for the young oysters to grow large enough to be able to protect themselves and withstand our rigorous winter climate. Enquiries are being made through the High Commissioner for Canada in London, and Mr. Fabre, in Paris, for the purpose of securing the services of an expert with the view of his taking charge of operations next spring. When the services of a proper person have been secured, the department will be prepared to carry on operations in a systematic and, it is hoped, successful manner.

A report on the Tidnish and Baie Verte oyster beds shows that the grounds are very much exhausted, and that very little fishing is carried on there at present. This

depletion is, however, ascribed to natural causes rather than to over-fishing—the water being shallow, the accumulation of old shells, and the ice which forms over the beds, is said to have the effect of killing the young oysters. This seems very plausible, but the real facts can only be determined by means of a careful inspection of the bottoms, which it is intended to have made in the spring of 1892 by one of the officers of the fisheries protection cruisers. A careful examination of the grounds will enable the department to determine whether their condition is such as to warrant the expenditure necessary to survey and re-stock them.

*In Nova Scotia.*

Sufficient information is not yet available to admit of any definite action being taken in the direction of the petitions received from various localities in this province, asking for the reservation and planting of oyster beds; but it is expected, if matters progress favourably, that it will be possible to begin operations at these points during the coming season.

*In Prince Edward Island.*

Summerside harbour, once famous for the excellence of its oysters, has greatly deteriorated of late years. It is represented as exceedingly well adapted for the purposes of oyster culture, and with this end in view arrangements have been made for a survey of the grounds and the setting apart of certain areas when operations are begun in the spring.

Petitions have been received from various other localities in the above named province, praying that certain exhausted beds be reserved for artificial culture, but sufficient information has not yet been received to enable the department to take definite action, although it may be possible to begin work on some of them during the coming season.

OYSTER PLANTING.

In re-stocking exhausted beds, it is intended that none but the largest and most carefully selected oysters from Prince Edward Island shall be used, and these will be planted only after careful examination of the bottoms and the removal of deposits of mud, rubbish or débris, likely to interfere with their growth. As these operations will be conducted under the supervision of an expert, whose services the department expects soon to obtain, there seems to be no reason to doubt but that our efforts will meet with that success which has attended similar ventures on the great natural oyster farms of the Chesapeake and other localities in the United States. There, an immense area of waters, which either through improvidence or neglect had hitherto been sterile and worthless, has assumed a condition of natural fecundity and great value; and there is indeed no reason why similar results should not attend our efforts, if proper means and care be adopted.

ADVANTAGES OF CULTIVATION.

Very little attention has hitherto been paid to the improvement or cultivation of oysters by individuals or private companies in Canada. This has been due, not so much to a lack of enterprise on the part of our people, as to the absence of any regular system of leasing or licensing grounds, whereby parties engaging in such undertakings would be secured in the enjoyment of the fruits of their labour, and guaranteed against intrusion



by unscrupulous neighbours, who, considering such work common property, would reap the benefits of their industry. This, of course, acted as a great drawback upon oyster culture by private individuals, and the time-honoured practice of fishing everywhere, and anywhere, at one's own free will, has prevailed. All the department has done was to see that the inadequate close season was strictly enforced.

The marvellous success which has crowned oyster farming, and private culture especially, in France, England and Holland, has attracted the attention of Canadians, and they begin to realize the advantage of protecting and fostering an industry which, through private care and attention, has been found in the old world to repay handsomely for the labour, attention and outlay bestowed upon it.

#### LICENSING OF OYSTER GROUNDS.

Under section 4 of the Fisheries Act, the Minister of Marine and Fisheries is empowered to grant fishery leases or licenses for a period not exceeding nine years; and under section 21, sub-section 4, of the same statute, such leases and licenses can be granted to persons desiring to enter upon the work of planting or forming oyster beds in any of the coastal waters of the Dominion. Acting upon the advice of the Minister of Justice, it was decided to issue licenses to such persons as complied with the requirements of the department, for such areas only upon which no public fishery at present exists. The applicants are required to make their applications on printed forms supplied by the department, the same being accompanied by a plan of survey made by a qualified surveyor on the basis of the admiralty charts. When these requirements have been complied with, the application is referred to the local inspector of fisheries for enquiry and report, and upon such report the department decides whether it is advisable to issue the license or not.

The industry being in its infancy in our country, it was deemed unwise to hamper it with any but a nominal license fee. In Europe, the rental of oyster farms rules high, as much as \$19 or \$20 per acre being paid in Holland, while in France it ranges from 35 to 45 francs per hectare, and as high as the equivalent of \$7.60 an acre on the coasts of Brittany. In England, where the rights of fishery go with the ownership of the land, the practice appears to be to form powerful companies with a large capital, and acquire extensive areas at purchase price in the most desirable localities. In the various States of the American Union much diversity of rentals exists. California disposes of her oyster grounds to the highest bidder, and gives a title in perpetuity. The nominal price was at first \$1.25 per acre, but the demand for choice limits—in San Francisco bay, for instance—became so great that as much as \$100 per acre has been paid for certain areas. New Jersey sells its oyster grounds to the highest bidder every five years, but limits individuals to 10 acres each, and companies to 30 acres. In Georgia a fee of \$1 per acre, charged upon all grounds leased for oyster culture, is appropriated to the support of public schools. Rhode Island leases its oyster areas at \$10 per acre. In Chesapeake bay—the oyster-fishing waters of America *par excellence*—one of the very best grounds, called “The Beach,” rents for from 2 to 5 cents per bushel of output, according to location. In the State of New York no uniform system of rental exists, the control of the fisheries being vested in different corporations and municipalities. Rates vary from 25 cents to \$10 an acre, although the greatest portion of the rents appear to be about \$1 per acre. No one person or firm can hold more than 250 acres, and in certain localities lessees are restricted to three or four acres.

After a careful consideration of the above facts in connection with the licensing of oyster grounds in Canada, it was decided :—

1. To fix the fee at \$1 per acre, calculated upon the acreage at low water, as shown on the approved plan of survey.

2. To fix the maximum limit of areas.

The above system is now in full operation, and during the present year licenses have been granted to the following parties, who have already entered upon the work of planting and cultivating the grounds licensed to them :—

Messrs. D. Hatton & Co., Montreal, 81 acres near Baie du Vin river, county Northumberland, N.B., licensed for fifteen years.

Mr. Joseph Hayley, Ruskin, 2 acres in Pownal Bay, Queen's county, P.E.I., licensed for nine years.

Mr. Charles A. Hyndman, Charlottetown, P.E.I., 40 acres in North River and Ellen's Creek, Queen's county, P.E.I., licensed for nine years.

Several other applications from Nova Scotia, Prince Edward Island, New Brunswick and British Columbia are under consideration ; and it is expected that the work of protecting and re-stocking our oyster beds, which has so propitiously begun, and which appears to be so favourably looked upon by an intelligent public, will be greatly expanded, and ultimately achieve the end which this department has in view—that is to say, placing the oyster industry of Canada upon a firm and stable basis of prosperity, so as to provide an additional source of wealth to our country, and particularly to our maritime population.

### THE BAIT SUPPLY.

The following is the first of a series of bulletins it has been decided to publish from time to time in aid of the fishing industry :—

The question of obtaining a continuous and reliable supply of bait is the one which if happily solved will do much to improve the condition and status of both the coastal and the deep-sea fisherman. At the present time much of the best fishing time of the year is lost in waiting for a supply of bait.

During the spring the early schools of herring are plentiful at many points on the coast, and if a sufficient supply of these can be put up, properly frozen when fresh, and kept in cold stores, where the temperature never rises to the freezing point, the fish thus treated will be available as bait after the ordinary supply of herring has been used and before the squid or other bait strikes in on the shores.

The questions for decision are—

1. Will herring thus treated form a good bait ?

2. Can they be made available to the boat fishery ?

3. Can they be put up in such quantities and at such prices as will place them within the reach of the fisherman, and at the same time yield a fair return to the merchant or capitalist who embarks in the business ?

1. Frozen herring will make a very good bait when properly handled, much superior to clams or any other reserve bait which can be obtained to keep the fishing going after the spring schools of herring have left, but the fish must be fresh when frozen ; you cannot freeze soft, half-rotten fish and expect them to come out firm.

2. Can they be made available to the boat fishery ?

Small freezers and cold stores can be put up in every fishing hamlet, and actual experiment has demonstrated that the frozen herring wrapped in an ordinary canvas bag and kept under the bottom boards of a fishing boat out of the sun have remained in the boat frozen for a period of twenty-four hours, and at the end of that time have had to be put in the sun to thaw out before being cut up to put on the hooks.



3. As to the quantities, prices, &c., so far as the coastal fishery by boats is concerned, a few fishermen joining together can put up by their own labour and at small cost a small building for use as a freezer and cold store, and could, by saving their own surplusage of spring herring, ensure themselves a supply of bait whenever other seasonal baits were short; and for the supply of the deep-sea fishermen larger buildings can be erected and a large supply of herring put up at certain places, where they are known to be plentiful in the spring, and where they could be readily put into the freezer at a cost of from fifty to seventy-five cents par barrel. And as these herring would readily command from three to four dollars per barrel when bait was scarce, the margin for cost of handling and freezing and for profit is a fair one, and should attract capital.

For many years past this system of freezing and cold storage has been in successful use on the great lakes, and at the present time nearly the whole catch of these waters, amounting in the aggregate to five or six thousand tons, is handled in this way, and the dealers are thus enabled to regulate the supply according to the demand.

Plans and specifications for the construction of a combined ice-house and freezer accompany this bulletin. These plans may be modified in regard to size to suit the requirements of any station, but they give the design in general of the most approved form for handling bulk fish.

It will be noticed that the freezing chambers, as set out in plan, show no chilling cylinders. The reason is, that it has been decided by men who use this system that less ice and salt are required for freezing bulk fish if trays are used; thus, metallic trays 4 inches deep and of a convenient size, 3 feet by 2 feet, and fitted with metallic covers, are recommended for rapid freezing; these trays filled with fish are packed between layers of ice and salt, and it is calculated that the freezers, as shown in the plan, can freeze ten tons of bulk fish in forty-eight hours; these fish are then removed to the cold stores and kept there till required for sale.

In storing the ice-house, the blocks of ice can be put in through a door high up in the gable and not shown in the plan.

The salt is stored on the first floor and the ice is taken from the ice-house direct to the ice mill on this floor, and a man with a wheelbarrow can fill up all the chilling cylinders in a short time each day, as once the temperature is lowered there is very little waste, so long as the drainage is kept perfect.

If preferred, cylinders can be put in the freezing chambers and the fish frozen by being placed on close slat shelves, between the cylinders; the only difference between the freezing chamber and the cold store in this case would be that the former would have a larger area of chilling surface in proportion to the size of the chamber than the latter.

In issuing this bulletin the enormous loss to both the fishermen and the country, arising from the enforced idleness which sometimes extends in the case of vessels to weeks at a time, is fully recognized, and whilst it would seem to be beyond the province of the department to enter on any special experiments on an extended scale, it is hoped that this bulletin meeting the eye of practical men, something may be evolved which will tend to minimize the loss, which is at present an admitted fact.

The following are the specifications for the construction of the building as per annexed plans:—

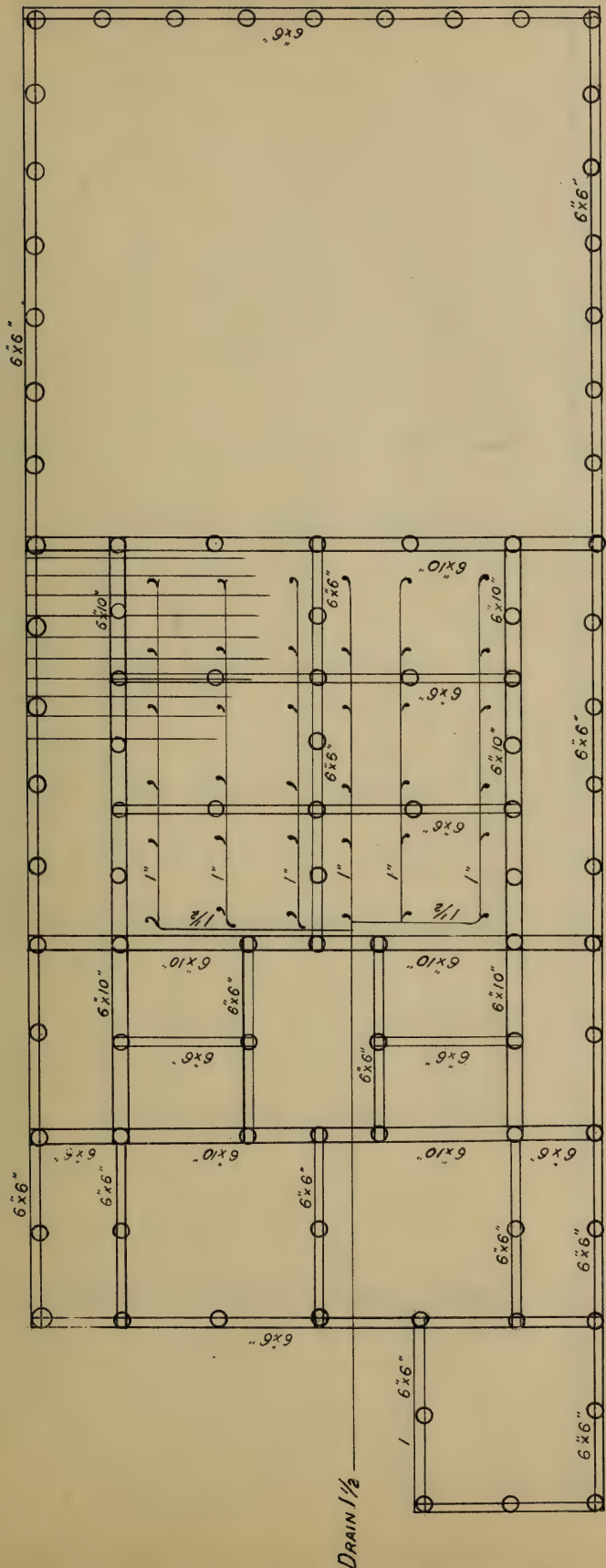
*SPECIFICATION of materials required and work to be done in the erection of Fish Freezers and Cold Stores for the Dominion Government according to the accompanying drawings and specifications, prepared by Denison & King, Architects, Toronto.*

Materials, Workmanship, &c.—The building is to be a balloon frame and built according to the sizes, forms and dimensions marked on the drawings, with spruce lumber, free from waney pieces, shakes or any imperfections injuring its strength. Sawn die square to the sizes hereafter specified and put together in a good, workmanlike manner.

All to be nailed to each bearing.

Posts and Sills.—Excavate for and set the posts (where marked by circle on foundation plan), well pounded down to a sound bearing and the earth filled in and well rammed around, when they are to be sawn off perfectly level to receive the 6 inches x 8





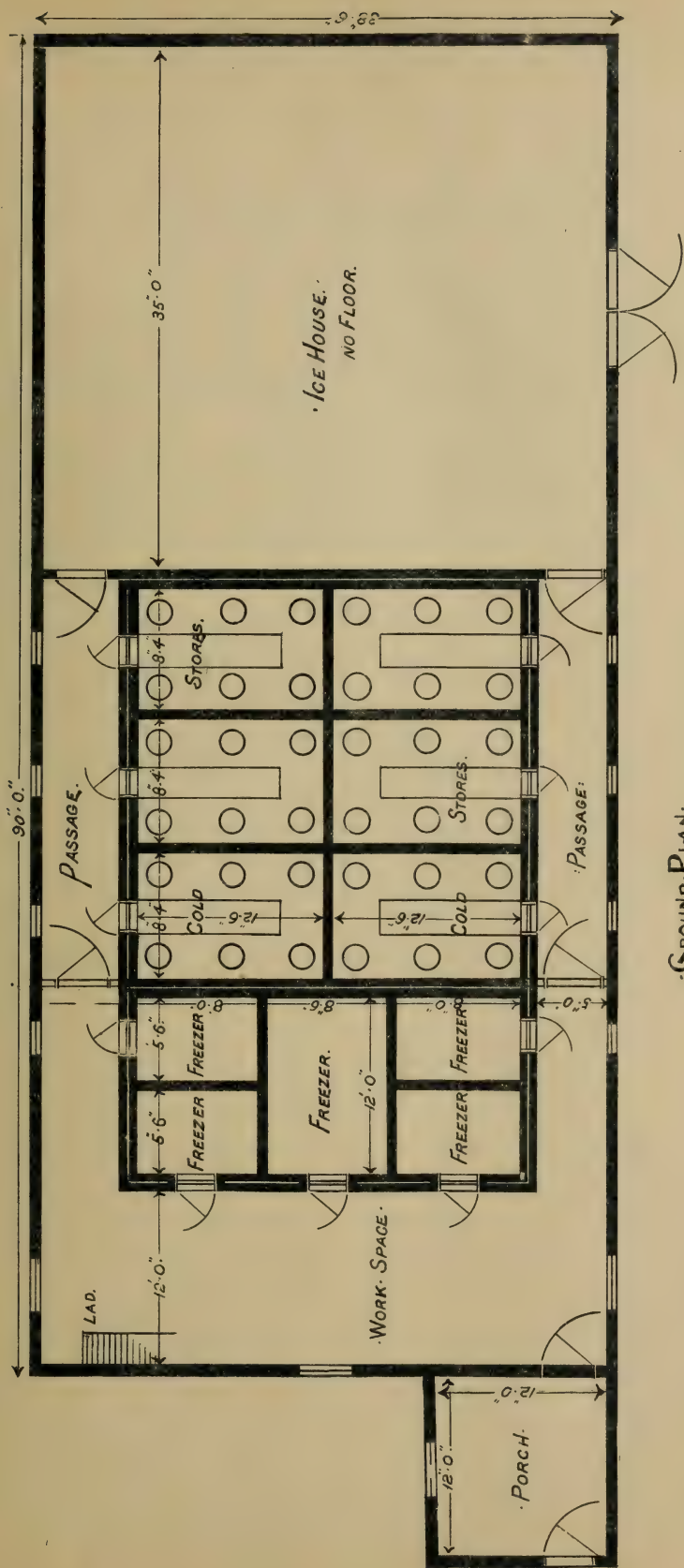
DRAIN 1 1/2

Plan of Foundations.

SCALE: 12 FT TO 1 INCH.

Denison & King.  
Architects.  
TORONTO.





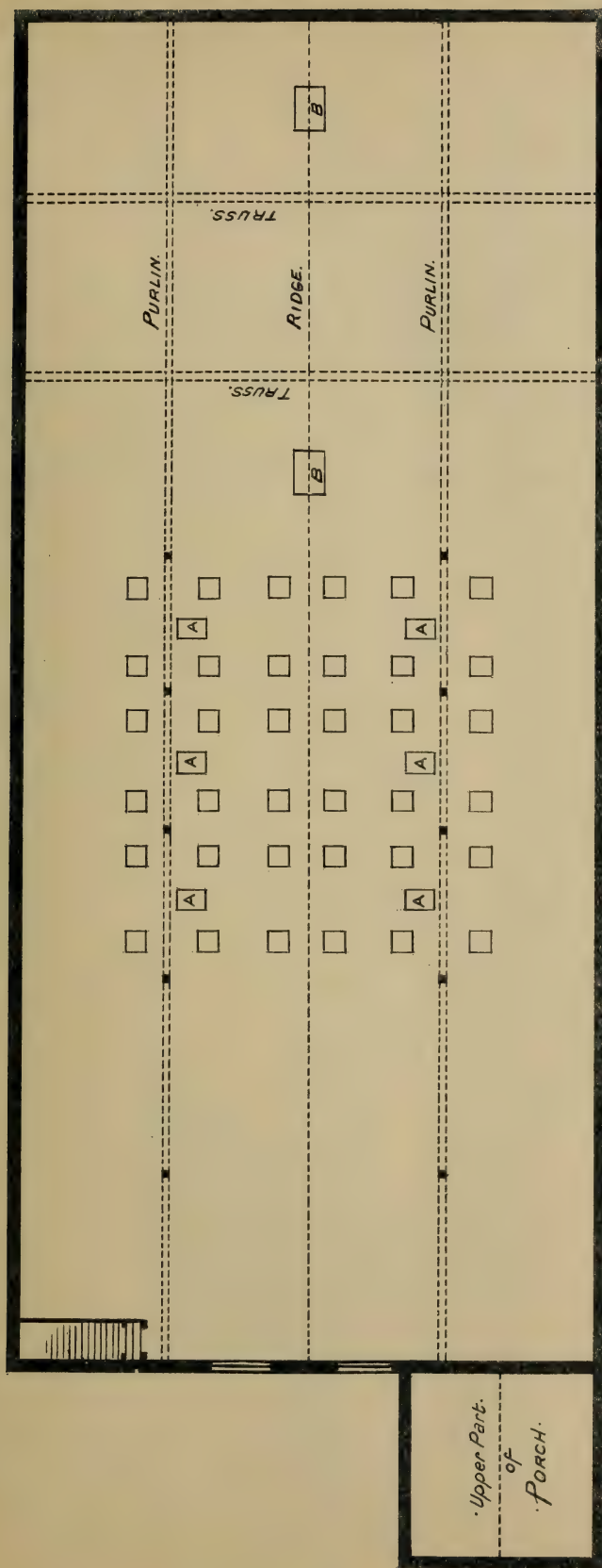
GROUND PLAN:

SCALE: 12 FT TO 1 INCH.

Denison & King.  
Architects.  
TORONTO.







Note A & B are man holes.  
but the remainder are  
to supply Cylinders.

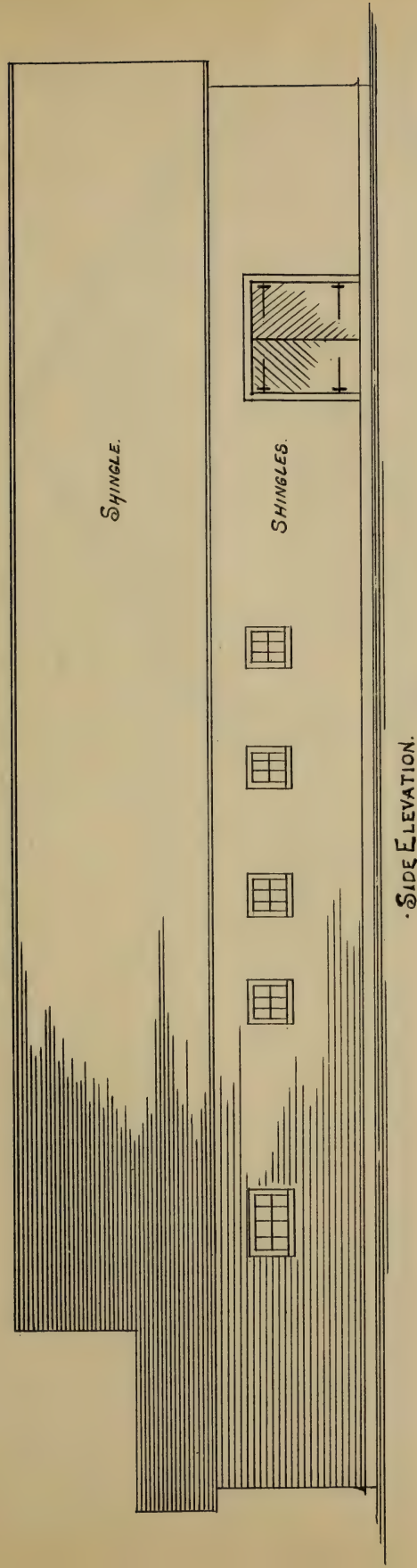
FIRST FLOOR.

SCALE: 12 FT TO 1 INCH.

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Architects.  
TORONTO.



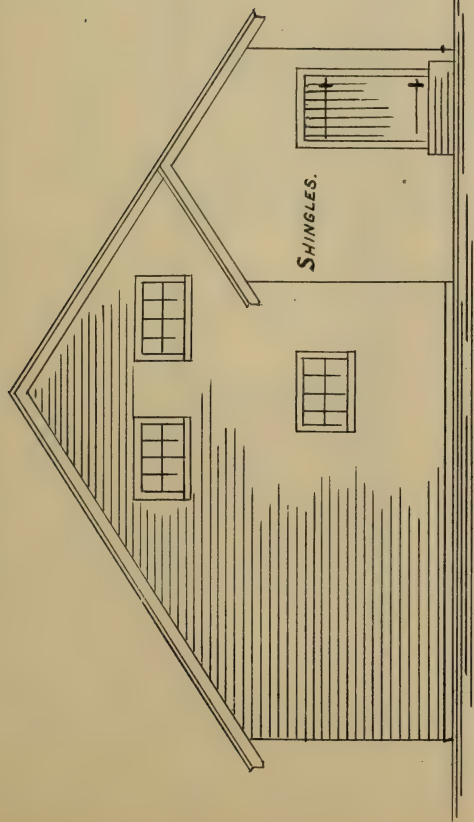




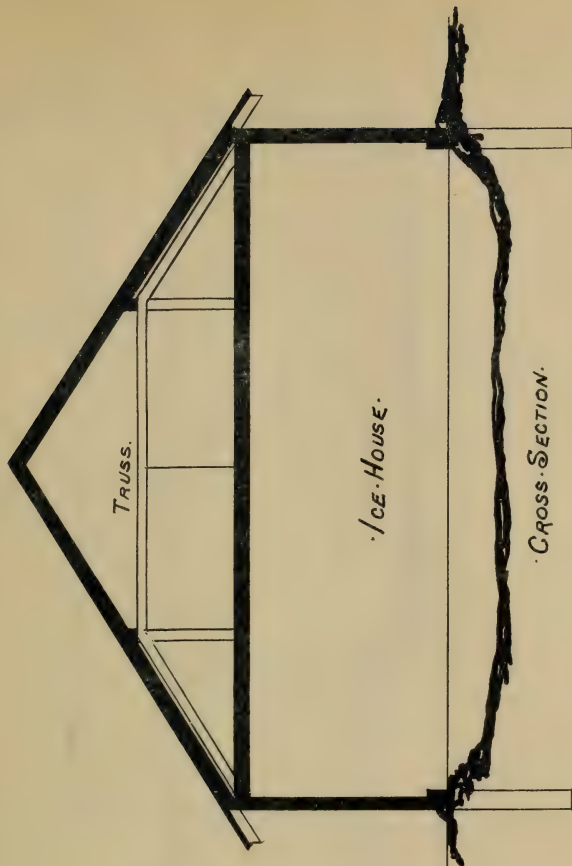
SCALE: 12 FT TO 1 INCH

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Architects.  
TORONTO.





FRONT ELEVATION.



CROSS SECTION.

SCALE: 12 FT TO 1 INCH.

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Architects.  
TORONTO.

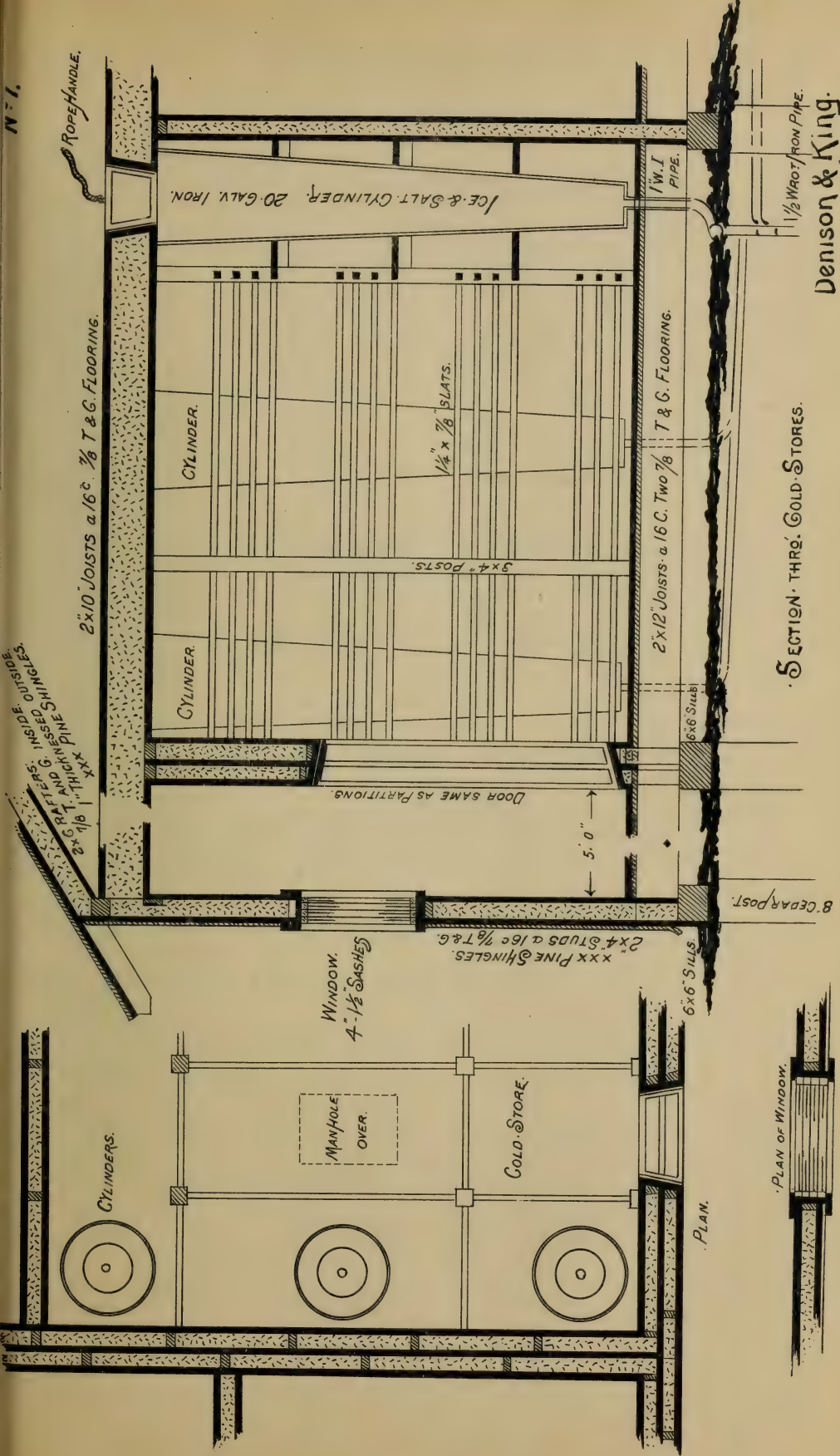












SCALE: 12 FT TO 1 INCH.

Denison & King.  
Architects.  
TORONTO.



inch, and 6 inch x 10 inch sills as marked. All angles and joints to be halved and all bearings to be pinned into posts.

Frame.—Build the walls, partitions and double partitions with 2 inch x 4 inch studs at 16 inch centres, 4 inch by 4 inch corner and opening studs and plates, with heads and sills of 2 inch by 4 inch. Run 1 inch by 4 inch girts to receive the ends of first floor joists and 1 inch by 6 inch long angle braces, both notched in. All studs to be in one length and to rest directly upon the beams excepting one side of the double partitions, which must rest on the floors.

Joists.—Lay to the ground floor 2 inch by 12 inch at 16-inch centres. Trim for staircase and trap over ice-house which will be 30 by 36. No ground floor to the ice-house.

Trusses.—The floor over ice-house and roof above is to be carried by two queen post trusses of the following sizes:—

Principals, 8 inch x 12 inch.

Tie beams, 8 inch x 12 inch.

Queen post, 8 inch x 8 inch.

Struts, 6 inch x 6 inch.

Straining beam, 8 inch x 12 inch.

Purlins, 6 inch x 8 inch with  $1\frac{1}{4}$ -inch upset king post rods.

Put  $\frac{3}{8}$  inch x  $2\frac{1}{2}$  inch wrought iron straps all properly framed together.

Put under the ends of these trusses 4 inch x 8 inch posts, braced both sides and tenoned into beams and plates and treenailed. Bolt on each side of tie beams 2 inch x 4 inch with  $\frac{3}{8}$ -inch bolts, having heads, nuts and washers set at 16-inch centres all along. Notch the end of joists into these beams so that these joists over ice-house will run longitudinally whereas the remainder will run across the building.

Roof.—Continue purlins of 4 inch x 6 inch the whole length and support same with 4 inch x 4 inch posts off floor joists. Build the roof with 2 inch x 6 inch rafters at 16 inch centres, well notched and spiked. 1 inch x 10 inch ridge board.

Bridging.—Run between each bearing of joists 2 inch x 3 inch double herring bone bridging, accurately cut and double nailed at each end.

Sheeting.—Sheet the whole of the outside studs and rafters and the centre of double partitions with 1 inch thickness boarding about 8 or 10 inches wide. The inside of walls on both sides of partitions, ceiling of freezers and cold stores and under-side of rafters and the double ground floor and single first floor to be planked with  $\frac{7}{8}$ -inch x 6 inch tongued and grooved.

All boards to break joint over bearings laid in single headings and to be blind nailed after being driven home tight and nailed to each bearing.

Shingling.—Cover the whole of the outside studding and roof with the best quality sawn pine shingles laid  $4\frac{1}{2}$  inches to the weather on roof and 5 inches on walls, and all nailed with two galvanized iron roofing nails. Run  $\frac{7}{8}$  inch ridge boards with 2 inch roll on top.

Sawdust Packing.—Fill in between all studs and outside walls rafters inside partitions and joists of first floor over freezers and cold stores with dry hemlock sawdust closely packed.

Doors.—Build all doors, both single and double thickness, with 2 x 4 inch studding, the same thickness as the walls, and sheet both sides with  $\frac{7}{8}$  x 6 inch tongued and grooved beaded sheeting, and  $\frac{7}{8}$ -inch splayed jambs all hung with 18 inch wrought iron strap hinges and fastened with heavy bow handle latch, and to the doors of cold stores and front entrance put good dead locks. Section of doors shown on plan number seven. Put to the large doors of ice-house 30-inch strap hinges with bolts top and bottom.

Flaps.—Over each cylinder and in the centre of each cold store put header between joists and form a splayed hole as large as possible in width by 16 inches long when finished. The manhole in centre over each cold store is to be 24 inches long, all as indicated. Build the lids the same thickness as floor and of similar materials filled in with sawdust. Put rope handle to each; see section.



Windows (four sashes to each).—Build the windows with  $1\frac{3}{8}$ -inch frames,  $\frac{1}{2}$ -inch stops between the four,  $1\frac{1}{2}$ -inch sashes, all fitted closely and made solid. 3-inch sills,  $1\frac{1}{8}$ -inch band mould. Frames to be put in before sawdust packing is done.

Ladder.—Build the step-ladder with  $1\frac{1}{2}$ -inch treads, 3-inch cut strings, 4 x 4 inch chamfered newel, 3-inch ovolo rail. Form hood over staircase on first floor with  $\frac{7}{8}$ -inch tongued and grooved sheeting, having similar door hung with 4 inch wrought iron butts and fastened with bow handle latch.

Shelving.—The cold stores are to be fitted up with three tiers of  $1\frac{1}{4}$ -inch shelving, supported by 4 x 3 inch posts and beams, and half-way between each shelf in height run  $1\frac{1}{2}$  x  $\frac{7}{8}$  inch slates let in ; see section.

Galvanized Iron.—The thirty-six cylinders are to be built of No. 20 galvanized iron soldered seams, and to be 12 inches in diameter at the bottom with end made to receive a 1-inch wrought iron drip pipe, 24 inches in diameter, at the top, tightly fitted up against sheeting of ceiling. Rivet and solder on eight wrought iron angle brackets to carry same properly secured from ceiling.

Drip Pipes.—Run from each cylinder 1-inch wrought iron pipe connected into  $1\frac{1}{2}$  which is to be taken 50 feet from building. Pipe not to be less than 3 feet in the ground. Do all excavating and filling in as required.

All pipes to be well tarred on the outside.

Painter and Glazier.—Glaze the windows with star glass, sprigged and back puttied.

Knot, stop, prime and paint three coats the outside doors and windows, sash and band moulding as directed. No other work to be painted.

## ARTIFICIAL DRYING OF FISH.

Mr. Cathcart Thompson, of Halifax, having brought to the department's notice a process of his invention, by which he claimed that fish could be dried by means of absorbent pads for merchantable purposes, thereby obviating the delays and dangers of present methods, his system was submitted to expert departmental officers for report, and on their reporting favourably, an appropriation of \$500 was obtained for the purpose of making practical experiments. A quantity of green codfish was purchased, and these after being dried under Mr. Thompson's directions, will be sent to the West Indies markets for sale, thus making a complete practical test of the value of the process.

The experiment is now being carried out, and should it prove successful, a bulletin will be issued, describing the process and giving the results.

## INTERNATIONAL LEGISLATION.

The diminution of marketable fishes in those waters which border on the United States and Canada demand early attention.

Whilst within Canadian jurisdiction, certain established rules control the dates and methods of fishing, there are practically no restrictions in the adjoining limits ; consequently, much of the good which Canadian fishery laws are designed to accomplish is frustrated to the mutual damage of fishing pursuits in these waters. If it were possible to induce the state governments of Michigan, Ohio, Pennsylvania, New York, Vermont and Maine to unite in ascertaining how far, and in what manner, the prevalent causes of deterioration may be affected by judicious legislation, and promptly enforce some moderate restrictions, the existing regulations enforced by Canadian fishery officers might be assimilated as closely as practicable. The effect would prove mutually beneficial and we might confidently expect a marked improvement in the international fisheries of the bordering waters.

This matter engaged the attention of the Government as early as 1875, and strong representations were then made to the authorities of the above named states, inviting their attention to the necessity for joint legislative action on the subject ; but no official action followed these appeals. Renewed representations of a similar nature were recently made, and it is sincerely to be hoped that they will meet with a better fate than the previous ones.

In connection with the above, the following remarks appeared in the number of 27th December, 1891, of *Forest and Stream*, a leadingsporting paper of New York, relative to the jurisdiction of the State of Pennsylvania over the waters of Lake Erie, on a judgment of the Supreme Court declaring that the legislative powers of the state over the waters of Lake Erie were absolute :

"The only rights which the states have surrendered to the General Government extend to admiralty and maritime cases. The fishery is regulated by the states. We have, therefore, along the chain of great lakes a body of waters controlled to their middle line by the states, while the other half is under the jurisdiction of Canada ; but concurrent legislation in the interests of the fisheries cannot originate between the States and Canada jointly, for no agreement would be binding upon the latter government as against a commonwealth which has not the treaty-making power. This is the present cause of serious difficulty in the establishment and operation by the United States of a fish hatchery in the State of New York to stock the waters of Lake Ontario. In the resolution of Congress carrying an appropriation for such a hatchery, the stipulation was made that the United States Fish Commission must first be satisfied that

New York has taken efficient measures for the regulation of periods for fishing and for proper protection of fish in the spawning season in the waters of northern New York. Just how New York, or any other state, is to arrive at concerted action with Canada, except through the intervention of the General Government, is hard to see; but there exists a strong and perfectly natural public sentiment in most of the states bordering on the lakes against surrendering to the Government such control of the fishery as may be thought necessary for the success of artificial stocking of the waters."

In connection with this matter, Capt. Collins, in the last report of the United States Commission of Fish and Fisheries, speaking of the fisheries of the great lakes, says:

"The marked diversity in the laws regulating the fisheries of the states bordering on the great lakes is a matter which appears to deserve consideration. The desirability of having some co-operative action on the part of the various lake states would seem to be apparent, in order that legislative enactments might have an equal bearing and influence upon the fisheries and the fortunes of the fishermen."

At a meeting of representatives from Canada and the State of New York to consider and recommend measures looking to the adoption of uniform laws for the protection, preservation and multiplication of the food fish supply of the international waters lying between these respective countries, it was shown that the food fish supply of the great lakes has been for the past thirty years suffering rapid diminution. On the New York side of Lake Ontario, where salmon, trout and whitefish formerly were so abundant as to furnish all the near markets with an abundant supply at prices within reach of the means of the day labourer, the product now scarcely recompenses the netter, and these fish, once so abundant and cheap, are no longer available for food to the multitude, but have become table luxuries to be enjoyed only by people of ample means.

On the Ohio side of Lake Erie there has been a nearly equal falling off of the higher grades of fish, but there still remains, on account of the greater fecundity of the coarser kinds, a fair supply of what are commonly known as pickerel, blue pike, pike, perch and bass which still afford a fair market stock at moderate cost.

Further up the great lakes the stock of whitefish is yet abundant.

The cause of the growing scarcity is attributed to the rapid and enormous increase of population in all the states and provinces bordering on the great lakes, which has caused a proportionally increased demand for food of all kinds.

The proposed remedies are protection and multiplication; and to make these effective, concert and harmony of action is necessary between all the Government authorities interested. Laws serve no good purpose while they remain dead letters on the statute books. If we would have efficient fish protection, we should provide not only wise statutes, but the constant means of enforcing them.

The following points were embodied in a recent memorandum which was approved by His Excellency in Council, and which it was suggested should be brought to the attention of the United States authorities when a conference of representatives of Canada and of that country next took place:—

#### 1. CLOSE SEASONS.

The necessity for close seasons to protect the fish during their breeding periods is universally admitted,



The close seasons in Canada are as follows:—Whitefish, 15th October to 30th November; salmon trout, 15th October to 30th November; pickerel, 15th April to 15th May; bass, 15th April to 15th June.

In the neighbouring states, the close seasons for the above named fish are as follows:—Michigan, none; Ohio, none; New York: bass, 1st January to 1st July; Vermont: pickerel and bass, 1st February to 1st June; Maine, none.

## 2. POUND-NET FISHING.

The policy of the Government of Canada has been to curtail this mode of fishing within as narrow limits as possible. The objection to its undue extension is that it is destructive in its nature. After succeeding in depleting a great many United States waters of fish, it has gradually crept into Canadian fisheries.

The destructive features of pound-net fishing are impressed on the languishing fisheries of the lake states and the impoverished shores of the north-eastern Atlantic states of the American Union. It flourishes for a while everywhere, and having exhausted fishing in one locality, it is shifted to another. Fishing from morning till night and from night till morning, in season and out of season, and all through every season, for all kinds of sizes of fish, it abates not its ravages for any cause but exhaustion. This is substantially the account given of its working in the United States by the late Prof. Baird and the late Mr. Milner—two able officials of the Federal Government.

In Canada, out of consideration for the relative position of our fishermen living on the lakes where pound-nets are in common use by their American neighbours, and the unequal position in which they were placed, both as regards the time and modes of fishing, as compared with the unrestricted fishing carried on in the United States waters within their sight, and in which fishermen are permitted to take fish at all times and by all means, their use had to be permitted under special regulations and subject to a heavy license fee. It is therefore possible to check this mode of fishing for the purpose of preventing its undue extension, and limiting its catching power.

Additional regulations are in contemplation by which the mesh of these fishing apparatus may be fixed in such a manner as to allow of the escape of young and immature fishes, and thus prevent the waste and destruction now going on.

## 3. PURSE-SEINES.

The destruction that the use of this fishing apparatus has worked in the mackerel fishery, both on the coasts of the United States and Canada, has ceased to be either a matter of doubt or controversy.

The following tables show the importations of mackerel into the State of Massachusetts for three decades—the first from 1850 to 1859, during which period the purse-seine was *not* in use; the second from 1863 to 1872, ten years following the general introduction of the purse-seine; the third from 1880 to 1889, after the purse-seine had been in continuous use for many years:—

## BARRELS of Mackerel Inspected.

Year.	No. 1 Grade.	Total Catch.
1850.....	88,401	242,572
1851.....	90,765	329,244
1852.....	84,030	198,120
1853.....	49,015	133,340
1854.....	30,595	135,340
1855.....	29,302	211,956
1856.....	89,333	214,312
1857.....	84,519	168,705
1858.....	75,349	131,602
1859.....	61,330	99,715
Total.....	682,637	1,864,915
Yearly average.....	68,263	186,491
1863.....	67,985	306,943
1864.....	103,383	274,357
1865.....	153,723	256,796
1866.....	150,332	231,696
1867.....	122,808	210,314
1868.....	93,091	180,056
1869.....	72,924	234,210
1870.....	66,046	318,521
1871.....	105,187	257,416
1872.....	71,866	181,856
Total.....	1,007,345	2,454,265
Yearly average.....	100,734	245,426
1880.....	20,453	243,958
1881.....	15,598	256,173
1882.....	39,045	258,382
1883.....	20,852	154,140
1884.....	22,377	283,794
1885.....	15,742	215,576
1886.....	19,574	66,042
1887.....	23,893	77,488
1888.....	14,545	50,907
1889.....	7,143	12,143
Total.....	198,222	1,618,603
Yearly average.....	19,822	161,860

## SUMMARY.

Years.	Total Catch.	Yearly Average.	No. 1 Quality.	Yearly Average.
1850-59.....	1,864,915	185,491	682,637	68,263
1863-72.....	2,454,265	245,426	1,007,345	100,734
1880-89.....	1,618,603	161,860	198,222	...

Comparing the catch of the latter decade with the aid of this perfected and destructive fishingengine, with that of the first decade, with its primitive modes of captures by gill-nets and hook and line fishing, an annual average decline in the total catch of mackerel of 23,631 barrels, and in the catch of No. 1 grade of 48,441 barrels, appears.

Although it cannot be positively asserted that this decline is due solely to the use of purse-seines, or that some other natural or minor causes may not have affected the

movements of the vast mackerel schools in approaching the shores ; yet, enough evidence has been adduced to attribute the steady decrease of the size and superior quality marketed, mainly to the destruction of small and immature fishes and the breaking up of the schools by purse-seines. These views, which are universally admitted to be sound in Canada, are to a large extent shared by experts in the States.

Prof. Brown-Goode, of the United States Fish Commission, writes that :

“ Since the adoption of the purse-seine no year has passed without a considerable amount of friction between the fishermen using this engine of wholesale destruction in the capture of mackerel and those engaged in fishing with other forms of apparatus. Petitions to Congress and State Legislatures have been made from both sides, and in some instances laws have been passed by State Legislatures prohibiting the use of menhaden seines within specified tracts of water, such as the Chesapeake Bay. These laws, while especially antagonistic to the menhaden fishery, were aimed chiefly at the purse-seine as a means of capture, and doubtless would have been equally prohibitory of mackerel fishing with purse-seines, had this been attempted within the limits \* \* \* In 1875 a delegation of fishermen from Portland, Me., and Gloucester, Mass., visited Washington for the purpose of securing the passage of a law prohibiting the use of purse-seines in the mackerel fishery.”

The undersigned is advised that the Secretary of State for the United States has expressed his willingness to give this subject his careful consideration, with a view to the adoption of joint measures to diminish the mischief complained of.

Anticipating such action, the Parliament of Canada, during the present session, passed a Bill prohibiting the use of purse-seines in the territorial waters of Canada, under a penalty of not less than \$50 and not exceeding \$500, for each offence, together with the confiscation of the vessel, boat and apparatus used in connection therewith.

#### 4. SAWDUST AND POLLUTION OF STREAMS.

The habit of discharging the refuse from saw-mills into public waters is a very serious evil, especially when it prevails on streams frequented by fish or on navigable waters, to the detriment of navigation.

It is sometimes exceedingly difficult to deal effectually with opposition from a powerful interest. Still, it is an undeniable fact that the damage caused to the fresh water fisheries and navigation by polluting and obstructing the waters with refuse from saw-mills and manufactories is increasing. Unless, therefore, speedy measures are taken to abate a nuisance which threatens serious permanent injury to both navigation and the fisheries, great and irreparable damage may be done.

The question of devising means to obviate such extensive injuries is one of expense. A moderate and judicious outlay, representing but a trifling percentage of the profits of mill-owners, would, in most cases, provide effectually against the injurious consequences of past and present neglect.

The baneful effects of sawdust as one of the most destructive agents for polluting streams, and otherwise causing injury to fish life, has called forth the efforts of different countries to stay its progress. Wherever mill-dams have been built across streams, and where sawdust, mill rubbish and other deleterious substances have been thrown into the waters from saw-mills and manufactories, fish life and vegetation of all kinds have invariably been lessened, and in many instances wholly destroyed. This is particularly noticeable among the higher order of fishes, especially the salmon, which is a migratory fish, ascending rivers and streams for breeding purposes. These waters are invariably of the purest, coldest and most limpid, and, therefore, best adapted for the propagation of this species. The salmon, at the time of the first settlement of New Brunswick and Maine, was found frequenting almost every river and stream emptying into the sea. So plentiful were they in many of these waters, before the lumbering industry took such a strong hold in the erection of mill-dams and saw-mills, with the consequent injurious effect upon fish life, that salmon were in great abundance and freely used by the inhabitants generally for domestic purposes, and also produced a large amount of traffic and



commercial wealth for the country. But as mill-dams and saw-mills increased in number, with greater capacity for their work, they formed impassable barriers to the ascent of salmon and other fishes to their natural spawning grounds above, and then the hurtful and pernicious effects from the sawdust and mill rubbish being constantly cast into the streams poisoned the spawning beds below, and stayed the growth of all vegetation in streams, thus doing away with insect life, which is the principal sustenance for fish in their younger stages of existence.

As this improvident work of the mills increased in magnitude, so did the yield of all kinds of fish decrease in the streams, until it had been found in some cases that after stripping the neighbourhood of all lumbering material and destroying all fish life these mills have gone into ruin and decay.

By a strict and impartial application of laws for regulating mill-dams for the easy ascent of salmon, shad and alewives to their proper spawning grounds; by the enforcement of statutes forbidding the drifting or throwing of sawdust, mill rubbish and other deleterious substances into the rivers; by the due observance of proper close seasons; by a stoppage of the deadly torch and spear; by the judicious enforcement of regulations regarding the use and setting of nets of all kinds, and with the supplementary aid to be derived from artificial fish culture, it is believed that only a few years would pass before an increase in the yield of salmon, shad, alewives and other fishes would be noticed in the whole extent of the waters between New Brunswick and Maine. There are yet to be found sufficient numbers of these fish, natives of the rivers, left, from which, by proper protection and good husbandry, an immense supply of fish food and commercial wealth could be readily obtained for the general benefit of the inhabitants. All authorities agree upon these points, that the surest mode of effecting permanency of the fisheries is to preserve the natural condition of the spawning beds; to allow the fish free access thereto, and to prevent their molestation while engaged in reproducing their species. None of these conditions can be carried out if the waters are polluted.

The question of the injurious effect resulting from the deposit of sawdust and mill rubbish upon the salmon fishing in the river St. John, and especially in the headwaters of this river, has engaged the attention of the Fisheries Department. In a memorial from the owners of saw-mills on this river and its tributaries, praying for exemption from the statutes relative to sawdust and mill rubbish, it was set forth that no law existed in the State of Maine on this subject, and that on that portion of the river St. John which formed the boundary between the United States and Canada, there were at least eight or ten mills on the United States side to one on the Canadian side of the river, and that as all the sawdust from the mills on the Maine side was permitted to be carried into the river, without restriction, any benefit which could possibly result from a stringent enforcement of the law in New Brunswick would be very trifling, and outweighed many times by the injury to the milling business in that province.

In consequence of such representations, the Government of the State of Maine was requested to consider the question, in order that united action might be adopted by both the Canadian and State Governments; and a promise was made that it would engage the attention of the legislature of that state.

### 5. INTERNATIONAL LEGISLATION.

To those who are engaged in promoting the salmon fisheries of their own country, it is always useful to observe the steps which are taken in other countries with a similar object. Of these, the most important has been the signature, on the 30th June, 1886, of the final protocol of the convention between the German Empire, the Kingdom of the Netherlands and the Swiss Confederation, for the protection of salmon and other migratory fish in the river Rhine. The adhesion of the Grand Duchy of Luxembourg was expected.

The convention itself bears date the 30th June, 1885, and taken in conjunction with the protocol, it contains the following agreements:—

It is provided that the main river between the falls of Schaffhausen and the sea, and including all the mouths through which the waters of the undivided Rhine at

Lobith can reach the sea, shall not be barred to the ascent of migratory fish by any stationary instrument extending more than half-way across the stream at low water. This regulation applies also to those tributaries where the territory of the contracting powers occupies both banks; or if the tributary forms the boundary with a neighbouring state where similar regulations are observed in such state.

There is a saving clause for special grants of fishery rights in tributaries.

In the main river and in tributaries where the territory of the contracting powers occupies both banks, if they admit of the ascent of salmon and shad, no drift or draft net exceeding 8 feet  $\frac{2}{4}$  inches in depth shall be used for catching fish. No drift or draft net shall be used within the distance from another net of twice the length of the longest net.

In the main river and its tributaries all fishing for salmon with draft nets shall be prohibited during two months in every year, that is to say, in Dutch territory, between 16th August and 15th October, inclusively; above Dutch territory, between 27th August and 26th October, inclusively.

Care is to be taken that during the autumn close-season the fishing for other migratory fish, and especially for whitefish, shall not be used as a pretext for salmon fishing.

In the main river below Basle, and in those of its tributaries which admit of the ascent of salmon or shad, a weekly close season of 24 hours is established for salmon and shad, to commence at 6 p.m. on Saturday; but in Dutch waters the weekly close season in the case of fixed fishing baskets is to commence at the first low water after 6 p.m. on Saturday, and to continue for two tides.

In those portions of the tributaries of the Rhine in which there are spawning beds for salmon, and in the main river between the falls of Schaffhausen and Maunheim, salmon fishing is prohibited during at least six weeks of the period from the 15th October to the 31st December, except by license of the authorities; such license only to be given on a guarantee that the roe and milt of salmon taken in the act or point of spawning will be used for artificial propagation.

The natural spawning grounds are to be made as accessible as possible to salmon.

The spawn and milt of salmon which may be taken is to be utilized as far as possible.

Each Government has the right to fix the minimum size of salmon to be taken or sold within its own territory, to draw up by-laws, and to appoint officers to enforce them. Representatives of the various states are to be appointed to communicate with one another, and to meet from time to time to deliberate on measures for the improvement of the salmon fisheries of the Rhine.

The convention is to continue in force for ten years and subsequently, unless revoked after twelve months' notice.

The above enactments are based upon conditions similar to those which influenced British legislation relative to the protection and preservation of the salmon fishery.

In September, 1890, a conference of delegates from France, Belgium, and the Netherlands, was held at the Hague to consider what means should be taken for the restoration of the salmon fisheries of the Meuse. The recommendations agreed upon, and submitted to the respective Governments for acceptance experimentally for a period of five years, run much on the lines of the agreement between the Netherlands and Germany concluded in 1886. They provide for very similar close seasons, both annual and weekly; for similar, but somewhat increased restrictions on the use of nets; for greater restrictions on fishing near dams; and, going further than the Rhine treaty, they provide for the erection of some important fish-passes; for the prevention of the pollution of rivers; and fix the size, under which no salmon may be taken, at the length of 14.72 inches.

CHARLES H. TUPPER,

*Minister of Marine and Fisheries.*



## THE FISHERIES OF THE GREAT LAKES.

## THEIR IMPORTANCE.

The immense value and importance of the piscine wealth of the fisheries of our great lakes, is not generally appreciated. The aggregate area of the Canadian portion of those large fresh water seas, called Lakes Superior, Huron, Erie and Ontario, divided by the boundary line between Canada and the United States, may be estimated as follows:—

	Square Statutory Miles.
Lake Superior .....	32,000
do Huron, including Georgian Bay .....	24,000
do Erie .....	10,000
do Ontario .....	6,700
	<hr/> 72,700

All these waters abound in whitefish, salmon-trout, herring, sturgeon, bass, pickerel, &c. The pound-net fishery is the most important. It absorbs a greater amount of capital, employs more men and yields larger returns than any other fishery, and its importance is yearly increasing.

The gill-net fishery is second only in importance to the pound-net fishery. It is carried on extensively in localities where pound-net fishing is impossible, or prohibited, under regulations of this department, and, therefore, becomes, in such localities, of paramount consideration. In addition to the boats employed in this fishery, steam tugs are also largely used.

The fishing season usually opens in May, and terminates on the first November, when the fall close-time begins. A large proportion of the fish caught are sold fresh, preserved in ice, or frozen, for export to Canadian and American markets.

A glance at the following table shows the value of those fisheries. The large quantity of whitefish, salmon-trout, herring, sturgeon and pickerel caught in these inland seas, would astonish many a salt water fisherman; and, notwithstanding the steady drain which improved fishing implements and more rapid transport by steam tugs, has imposed upon them, these fisheries do not appear to show any alarming signs of depletion.

The yield for 1890, valued at nearly two million dollars, shows almost as large an increase over 1885, as that year did over 1880. The fact that, last year, 61 steam tugs, or vessels, and 1,065 fishing boats, manned by 2,845 men, not including shore-men, were employed, using 1,365,588 fathoms of gill-nets, 27,554 fathoms of seines and 285 pound-nets, representing an invested capital of over half a million dollars, exclusive of the value of ice-houses, wharves, piers, fish-cars and other fixtures, is more than sufficient to demonstrate the commercial importance of this industry; which, at the same time affords a means of support to such a large population.

## RELATIVE POSITION OF CANADIAN AND UNITED STATES FISHERMEN ON THE GREAT LAKES.

Complaints now and then find their way into the public print, that, owing to the restrictions placed, by the Canadian Government, upon the times and modes of fishing, our fishermen on the great lakes are placed under a disadvantage, as compared with



those of the neighbouring republic. The operation of these necessary regulations appears to some—and usually to those persons, who are, at least unfavourably disposed if not opposed, to any restrictions whatever, on their fishing pursuits—to be comparatively unfair to Canadian fishermen in consequence of their strict enforcement, both as regards the times and modes of fishing, while their less hampered neighbours, in the United States waters, almost within their sight, are permitted to take fish at all times, and by means of all fishing engines, without let or hindrance, within the same geographical districts. The Government is openly accused of protecting the fish for the benefit of United States citizens, and by a strict enforcement of the regulations depriving British subjects of corresponding advantages.

It must be admitted, that all this seems, at first sight, to be very plausible, and undoubtedly well calculated to attract public notice, and enlist local sympathies. But is it not, in a considerable degree, at least, fallacious? Every unbiassed and observing person, who devotes any attention to this subject, knows that the fish of our great lakes are attracted inshore and towards the islands and shoals, by the two great natural instincts, want of food and for reproduction. The quantities of food and the facilities for propagation are quite as attractive, generally, on the Canadian as they are on the United States side of the lakes. Within the area on our side of the international boundary, American citizens are not permitted to fish.

Then, as regards the deep water fishing, the fish frequenting these grounds cannot be considered in any other light than a common property, of mutual advantage, altogether irrespective of the shores to which they may resort for nutriment, or to increase their species.

It seems, therefore, conclusive to impartial minds, that the invidious effect of our protective system, is, however, convincing in theory and appearance, much more fanciful than real. The idea, that in such extensive bodies of water, as Lake Superior, for instance, the local range of various kinds of non-migratory fishes extends across an imaginary water boundary is not at all a practical one. It has been very industriously circulated in support of claims made by fishing communities to be exempted from economical regulations, but it is so obviously an excuse, that the parties using it have always confined themselves to mere assertions.

#### COMPARATIVE STATEMENTS.

Another great cause of complaint among the advocates of free fishing, is the alleged enormous difference in the catch between United States and Canadian fishermen. They point to the fact that with no restrictions whatever as to the number of fishing apparatus and with no close-seasons of any kind, their neighbours stand in a far better position than they do in this respect.

In order to set this long debated matter at rest, comparisons have been made with the view of establishing whether these contentions were founded on facts. The recent publication of the last report of the Commissioner of Fish and Fisheries, proves the most interesting in this respect, inasmuch as it affords an opportunity of practically testing the matter, and once more showing the immense value of the Canadian lake fisheries, as compared with those on the other side.

This elaborate work contains a review of the fisheries of the great lakes in 1885, compiled by Messrs. Hugh M. Smith and M.M. Snell, with an introduction and description of fishing vessels and boats by Capt. J. W. Collins.

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The United States Commission having taken the years 1880 to 1885 to exhibit what progress had been made in the fishing industry of the fresh water lakes, a similar statement has been prepared to show the relative increase of the Canadian fisheries, during the same period. A fact worthy of note, is, that whenever a scarcity or abundance exists, on one side of the lakes, like results are experienced on the other side. In addition to professional and semi-professional fishermen, the United States returns include shoremen and preparators, while ours only give the men actually engaged fishing in boats or vessels. True, the number of fishermen in the United States doubled during the above named period, while ours increased only 33 per cent ; but, if the United States shoremen were deducted, it would reduce this number by about one-third. Although the value of the United States fishing fleet, on the lakes, including the value of pound-nets, gill-nets and seines, was nearly 400 per cent larger than ours, the value of their total catch of fish in 1880 amounted to only a little over 100 per cent more than ours, while in 1885 it had fallen to less than 50 per cent.

TABLE  
Showing the Variations in Amount and Value of Fishery Products on the Canadian Side of the Great Lakes, from 1880 to 1885.

LAKES.	WHITEFISH.		TROUT.		HERRING.		STURGEON.		ALL OTHER KINDS.		TOTAL LBS.		TOTAL VALUE.	
	1880.	1885.	1880.	1885.	1880.	1885.	1880.	1885.	1880.	1885.	1880.	1885.	1880.	1885.
	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	§	§
Superior...	354,800 *2,257,000	606,160 4,571,947	312,800 1,464,750	911,570 3,488,177	324,000	41,500 182,760	782,800 3,816,625	83,000 258,216	1,642,230 8,825,780	111,871 291,523				
Huron....	2,113,200 *2,700,778	2,654,260 1,425,380	1,470,800 2,084,500	3,980,000 2,539,780	1,570,000 1,265,650	5,000 204,000	4,696,800 7,205,273	1,264,740 6,010,860	10,294,800 11,457,170	627,398 276,397				
St. Clair...	224,400 *77,922	56,800 41,125	7,000	107,300	2,844,200 250,700	76,200 998,500	1,019,800 1,850,927	289,600 708,740	3,347,900 2,185,795	98,405 40,193				
Eric.....	205,600 *3,333,800	186,080 3,531,855	26,200	106,900	5,935,400 19,354,900	459,260 1,970,000	2,008,600 29,087,300	1,073,160 23,734,912	7,653,900 51,556,517	242,774 1,109,096				
Ontario...	800,800 *1,064,000	365,300 90,711	252,200 569,700	330,100 20,510	1,526,600 403,585	20,200 545,283	2,965,000 3,640,000	2,161,750 1,496,686	4,439,350 2,398,466	188,103 95,869				
Totals...	3,638,800 *9,433,500	3,868,600 9,661,018	2,042,800 4,145,150	5,328,970 6,155,367	11,876,200 22,556,285	314,800 3,717,783	11,473,000 45,600,125	4,872,250 32,209,414	27,378,180 76,123,728	416,791 1,813,078				

\* Represents United States side.



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SHOWING in Detail the Changes in the Number of Persons, Vessels and Boats, Amount  
Lakes from

LAKES.	PERSONS EM- PLOYED.		STEAM TUGS AND VESSELS.				BOATS.			
	Number.		Number.		Value.		Number.		Value.	
	1880.	1885.	1880.	1885.	1880.	1885.	1880.	1885.	1880.	1885.
					\$	\$			\$	\$
Superior . . . . . {	149	214	2	4	3,000	6,500	62	90	3,310	8,235
	*414	914	4	15	9,400	68,100	157	504	16,840	32,635
Huron, including Geor- {	577	1,075	9	15	9,700	53,800	199	339	24,103	48,700
gian Bay. {	*470	892	3	10	7,000	41,300	108	551	13,905	31,646
St. Clair and Tributaries {	311	301	.....	1	.....	2,000	52	58	1,025	1,880
	*356	272	2	2	3,000	1,150	50	213	5,000	6,307
Erie. . . . . {	178	346	.....	.....	.....	.....	85	185	4,820	50,296
	*1,620	4,298	9	53	38,400	178,200	593	1,483	45,480	120,557
Ontario. . . . . {	726	594	7	3	4,600	3,000	294	251	10,393	11,390
	*612	600	1	2	3,600	4,800	166	465	9,500	15,648
Totals. . . . . {	1,941	2,530	18	23	17,300	65,300	692	923	43,651	120,501
	*3,472	6,976	19	82	61,400	293,550	1,074	3,216	90,725	206,793

\* Lines of figures marked \*

NOTE.—The number of men employed on United States side include the shoremen and

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and Value of Apparatus and Capital invested, in the Canadian Waters of the Great 1880 to 1885.

POUND-NETS.				GILL-NETS.				SEINES.			
Number.		Value.		Number.		Value.		Number.		Value.	
1880.	1885.	1880.	1885.	1880.	1885.	1880.	1885.	1880.	1885.	1880.	1885.
		\$	\$			\$	\$			\$	\$
2	5	500	1,850	251	1,298	5,604	19,696	32	43	2,010	2,920
43	230	14,950	67,520	4,630	7,557	25,280	78,082	28	58	1,545	5,770
189	586	49,425	113,350	3,360	3,444	20,600	35,333	67	62	6,610	5,213
	4		800					42	34	6,000	8,825
	57		12,550	180	23	1,080	160	21	32	2,240	3,330
54	132	14,385	9,470	2	65	40	2,028	18	71	2,800	8,320
758	928	233,600	252,285	5,775	22,644	22,500	75,507	80	57	9,207	5,104
2	2	300	250	797	488	20,669	18,190	9	69	1,950	3,177
34	14	14,000	6,975	6,000	4,722	20,000	23,952				
58	213	15,185	43,270	5,474	7,382	74,320	95,814	177	209	19,602	19,417
1,024	1,815	311,975	455,680	19,945	38,390	88,460	213,034	129	217	18,360	23,242

represent United States side.  
preparators, and in Canada only the fishermen proper employed in boats and vessels.

The above tables show that during the five years, from 1880 to 1885, the total quantity of fish caught on the Canadian side of the lakes increased nearly three-fold, while the United States catch did not even double :

	1880. Lbs.	1885. Lbs.	Increase. Lbs.
Canada.....	11,473,000	27,378,180	15,905,180
United States.....	45,600,125	76,423,728	30,823,603

In order to arrive at a correct understanding of the matter, it must be borne in mind that the use of pound-nets prevails to a much greater extent on the American side than on ours. While, in 1885, there were 213 pound-nets licensed by this department from Port Arthur, on Lake Superior, to Port Maitland, on Lake Erie, their returns show 1,815, one-half of which were in Lake Erie. With nine times the number of pound-nets, and five times the number of gill-nets, the American fisheries should make a better show, were fish more plentiful on their side than ours, as is often alleged by interested parties.

The above compilation also proves that our progress during these five years has been more rapid than theirs. A glance at the following table will enable any one to understand this :

	Ratio of Increase.	
	United States.	Canada.
Lake Superior.....	146 per cent.	217 per cent.
do Huron.....	41 do	200 do
do St. Clair.....	11 do	246 do
do Erie.....	133 do	404 do
do Ontario.....	40 (decrease)	103 do
	—	—
Total average increase..	84 per cent.	204 per cent.
	==	==

If we now come to the various kinds of fish, we find that, taking the five lakes together, whitefish show very slight signs of improvement. Although the yield increased 100 per cent on both sides of Lake Superior, it remained about stationary in Lake Erie. On Lake Huron, our figures show an increase of 25 per cent, while the American fishery decreased 50 per cent; and on Lake Ontario there is an enormous decrease of 50 per cent on our side, and of 90 per cent in the American waters. In fact, the insignificant catch of 90,000 lbs. in 1885 would seem to show that this delicious fish is fast disappearing from American waters, as during the same year our catch amounted to 365,000 lbs.

Salmon-trout makes a better show, our increase being at the rate of over 110 per cent, while the United States fisheries show less than 50 per cent. In the Canadian waters of Lakes Superior, Huron and St. Clair, the catch of salmon-trout trebled between 1880 and 1885. On Lake Ontario, our fishermen caught 82,000 lbs., while only 20,000 lbs. were taken on the New York side, thus showing a very marked decrease when compared with their large catch of 570,000 lbs. in 1880.

The great bulk of herring and sturgeon are caught on Lake Erie. The American catch between 1880 and 1885 did not even double, whereas our statistics show an increase in herring of 800 per cent and in sturgeon of 400 per cent.



## THE FISHERIES OF MANITOBA AND THE NORTH-WEST TERRITORIES.

With the view of affording additional protection to the valuable fisheries of the province of Manitoba and the North-West Territories and for the purpose of guarding against the possible depletion of fish in Lake Winnipeg and other waters, the following regulations, after having been submitted to the representatives of the above-named province, and to the local inspector of fisheries, who should have a practical knowledge of the matter, as well as having been published in the public press, for the purpose of eliciting remarks and criticism, were approved by His Excellency the Governor General in Council:—

## REGULATIONS RELATING TO FISHING IN MANITOBA AND THE NORTH-WEST TERRITORIES.

1. There shall be two kinds of licenses for fishing in the province of Manitoba and the North-West Territories, to be designated “commercial licenses” and “domestic licenses”; which licenses shall be issued to resident British subjects only, and who are the actual owners of the fishing gear included in such license.

2. Every company, firm, trader, or person, fishing for trade and commerce in that part of lake Winnipeg hereinafter specified, shall have a “commercial license,” and the applicant for such license shall, in the application therefor mention the number of tugs, or other boats, to be employed under such license, as well as the length, size and description of nets to be used, and that such license is applied for the purpose of fishing in lake Winnipeg only, and outside the excluded limits, as shown on the map descriptive of lake Winnipeg, which accompanied the Annual Fisheries Report of 1890.

3. No fishing tug shall fish with more than 10,000 yards of gill-nets, and no sailing or trading boat shall fish with more than 3,000 yards of gill-nets, and all gill-nets so used shall be not less than five inches extension measure in the size of the mesh.

4. The fee payable on a “commercial license” for gill-net fishing shall be, for every fishing tug included in such license, \$20, and in addition a fee of \$2 for every 1,000 yards of net included in the license; and for every sailing, trading or other fishing boat, included in a “commercial license,” a fee of \$10 shall be paid, which shall include a limit of 3,000 yards of net to each boat; but in no case shall a “commercial license” be granted to any one company, firm, trader, or person for the use of more than in the whole 40,000 yards of net, and no company, firm, trader, or person shall have, or be interested in more than one “commercial license.”

5. To prevent the great destruction of fish, in many cases unfit for the market, or for human food, caused by catching them in gill-nets during inclement weather, “commercial licenses” for gill-net fishing in lake Winnipeg will not be granted after the season of 1893.

6. Every farmer, settler, or *bonâ fide* fisherman, Indian and half-breed, who is an actual resident of the locality where he proposes to fish, shall be entitled to a “domestic license.” The holder of a “domestic license” (except in the case of a license for Seine fishing), shall be entitled to fish with not more than 300 yards of net. A fee of \$2 shall be paid for each “domestic license.”

Applicants for “domestic license” shall describe in their applications the locality, and the nets or other apparatus which they desire included in the license, and also the kinds of fish they desire to be licensed to catch.

Nets for catching whitefish, trout, or tullibee, or nets used on the grounds usually frequented by these fish, shall have a mesh of not less than 5 inches extension measure; provided that when the applicants apply for a license to fish for other fish than the above named in a locality not frequented by whitefish, tullibee, or trout, then the mesh may be not less than 4 inches extension measure.

A “domestic fishing license” may be granted for any of the waters of Manitoba and the North-West Territories; provided, however, that no description of net, or other fishing apparatus, whatsoever, shall be used under a “domestic” or other license, within

a radius of half a mile of the mouth or outlet of any river, or stream, flowing into, or out of any of the lakes of Manitoba or the North-West Territories.

7. The holder of a "domestic license" for net fishing for sturgeon shall be entitled to use not more than 300 yards of gill-net, with a mesh of not less than 12 inches extension measure.

A fee of \$2 shall be paid for each such license.

8. The holder of a "domestic license" for seine fishing shall be entitled to use a seine not exceeding 66 yards in length, with the mesh not less than 4 inches extension measure.

A fee of \$25 shall be paid for each such license.

9. No "commercial" or "domestic license" shall be issued until the fees therefor have been paid; such fees being payable strictly in advance.

10. Fishing by means of nets or other apparatus, without leases or licenses, is prohibited in the waters of Manitoba and the North-West Territories.

11. The following shall be the close seasons during which the several fish herein mentioned shall not be fished for, caught, killed, bought, sold, or had in possession by any one whatsoever:

1. Whitefish, salmon trout or lake trout, and tullibee, between the 5th day of October and the 15th December in each year, both days inclusive;

2. Pickerel (*doré*), gold-eyes, pike, mullets, and maskinongé, between 15th April and 15th May, both days inclusive;

3. Speckled trout of every kind, between 15th September and 1st May, both days inclusive;

4. Sturgeon, between 15th May and 15th July in each year, both days inclusive.

12. Seines, nets, or other apparatus, used for catching fish shall be so raised or adapted as to admit of the free passage of fish through, by or out of the same, from six o'clock on every Saturday afternoon to six o'clock on every following Monday forenoon, and during such close time no one shall catch fish by any means whatsoever; and any fish so taken, caught, or killed, together with the nets or other apparatus used shall be forfeited.

13. All licenses shall be issued annually and shall be in force for the periods hereinafter mentioned, subject, however, to the laws and regulations that may from time to time be in force respecting close seasons, viz.: "commercial licenses" from 1st May to 4th October following, both days inclusive; "domestic licenses" from the 15th December to 4th October following, both days inclusive.

14. No one shall use a bag-net, trap-net, or "fish pound," for capturing fish in the waters of Manitoba or the North-West Territories, except under the following conditions:

The holder of a "commercial license" issued for that purpose, may engage in pound-net fishing after the season of 1893, within the prescribed limits for fishing under "commercial license" in lake Winnipeg only:

Provided that no company, firm, trader, or person shall use, or be licensed to use more than four pound-nets; and provided also that no company, firm, trader, or person shall at the same time hold licenses for the use of both gill-nets and pound-nets.

The mesh of pound or trap nets of every description shall be not less than four and one-half inches extension measure in the "pots," "pounds," "hearts," and "tunnels," and not less than seven inches in the "bar" or "leader": doubled-headed pounds are hereby prohibited.

The fee payable on a "commercial license" for pound-net fishing shall be \$50 for each pound-net included in the license, together with a fee of 10 cents for every fathom length of the leader to such net.

15. No lime, chemical substances, or drugs, poisonous matter, dead or decaying fish, offal of fish, sawdust and mill rubbish, or any other deleterious substance, shall not be thrown into, or be allowed to pass into, or be left or remain in any water frequented by fish in Manitoba and the North-West Territories; and any person violating this regulation shall incur a penalty not exceeding one hundred dollars.



16. These regulations shall apply to Indians and half-breeds, as well as to settlers and all other persons : provided always that the Minister of Marine and Fisheries may from time to time set apart for the exclusive use of the Indians, such waters as he may deem necessary, and may grant to Indians or their bands, free licenses to fish during the close seasons, for themselves or their bands, for the purpose of providing food for themselves, but not for the purpose of sale, barter, or traffic.

17. The use of explosive materials of any kind to catch or kill fish is prohibited in the waters of Manitoba and the North-West Territories ; and the use of spears, grapnel-hooks, negogs, nishagans, and fire-arms for killing fish is also prohibited :

Provided always that special licenses may be issued to Indians or Indian bands permitting them to catch and kill fish in the manner specified in such license for the sole purpose of providing themselves or their bands with food.

18. No trader, peddler, hawker, or any other person whomsoever shall engage in buying, trading or otherwise obtain or be in possession of fish of any description, caught or killed by Indians, half-breeds, or any other person whomsoever, on any Indian reserve, or elsewhere during the close seasons fixed by law, and in which Indians are permitted by license or otherwise to catch fish for the sole purpose of providing food for themselves or their bands.

19. For the information of persons obtaining licenses under these regulations, every license shall have the regulations printed upon it.

20. The Minister of Marine and Fisheries having determined that it is necessary in the public interest, every dam, slide, or other obstruction, made or to be made, across or in any river or stream in Manitoba or the North-West Territories, shall have the necessary fish-pass as provided by section 15 of the Fisheries Act, and no net or other device shall be used to catch or kill fish, or obstruct their passage up or down any river or stream within 200 yards of any such dam, slide, sluice or fish-pass therein ; nor in any other parts of such rivers and streams without leaving at least one-half of the main channel thereof wholly freed from the operations of any such net or other device as aforesaid.

21. These regulations shall supersede all former regulations heretofore made under the Fisheries Act which relate to the fisheries in the waters of Manitoba and the North-West Territories of Canada ; and such former regulations are hereby repealed.

22. All materials, implements, or appliances used, and all fish caught, taken or killed, in violation of these regulations, shall be seized and confiscated, and any person or persons violating these regulations shall incur the penalties provided by the Fisheries Act.

## THE DEEP-SEA FISHERIES OF BRITISH COLUMBIA.

These fisheries are probably the richest as well as the most varied in the world, but they have, until now, been very little developed. The seas, gulfs, bays, inlets, rivers and lakes of British Columbia swarm with prodigious numbers of fine food fishes. Among these are the salmon, sturgeon, cod, halibut, herring, oolachan, fur seal, &c., all denizens of the Pacific waters, and found chiefly in the rivers and outer shores of British Columbia and in Behring Sea. The salmon canning industry has taken immense strides.

The advantage which this province offers for the prosecution of the fishing industry are exceptionally good. With a coast line of 7,000 miles of sea-washed shore, it has innumerable islands, bays and fiords, forming safe and accessible harbours for vessels of all sizes ; and along this coast, within the territorial waters, are found fish and mammals in great variety, and in greater numbers than in any other part of the world. These advantages and the development of the fishing industry, which, at no distant date, must follow, point to a leading element in the commerce of British Columbia.



The action recently taken by the Imperial Government in connection with a scheme of crofter colonization and the suggestion to develop the fisheries of the Pacific seaboard thereby, as well as certain remarks made by the British Columbia Board of Trade in its twelfth annual report with reference to the non-development of these fisheries, make it opportune to recapitulate the efforts of the Fisheries Department for the purpose of making known the immense wealth of these fisheries, and the great inducements thus offered.

As early as 1872, the annual report of this department published extracts from a paper written by Sir H. L. Langevin, which contained a description of the various kinds of sea fish and mammals found in these waters. A pamphlet by the Rev. M. C. Lumsden, on the same subject, was also reprinted, and copious extracts were given from a prize essay of Alex. C. Anderson, Esq., who subsequently became inspector of fisheries for the Province of British Columbia. In addition to an extended notice of the salmon fisheries, this work deals with the various species of sea fish frequenting the waters of the Gulf of Georgia and the coasts of Queen Charlotte Island. It treats of the cod, halibut, herring, seals, &c., concluding with remarks on the whale fishery.

In 1874, a paper of Matthew Macfie, Esq., F.R.G.S., in which the various kinds of sea fish frequenting the coast of British Columbia are described, and in which attention is called to the great facilities possessed by the province for the catching and curing of fish, was reproduced in the annual report of the department.

The report of 1876 draws attention to the whale, fur seal and dog fish fisheries.

That of 1880 deals exhaustively with the fur seal fishery, and suggests that means be adopted for the preservation of this valuable industry.

The annual report for 1881 gives a description of a cruise in H.M.S. "Rocket" by way of the Gulf of Georgia, Queen Charlotte Islands, Naas and Skeena Rivers and Queen Charlotte's Sound. The different kinds of fishing carried on at the different places around that route are therein fully described.

The report of 1883 treats at length of the natural history of the coal fish (the skil or black cod of the present day), the grounds where it is found, and its importance as a valuable fish industry. The modes of extracting and refining fish oils are also described, as well as the best markets for disposing of the same. Mention is made of endeavours to organize a considerable immigration of practical men desirous of entering on the prosecution of these fisheries. Pamphlets and information were supplied to parties in Newfoundland and Norway for the purpose of inducing them to emigrate to British Columbia, and to establish at favourable points settlements of their own for the purpose of carrying on deep-sea fishing.

In 1885, the reports were published of an exploration around the coasts of Queen Charlotte Islands, undertaken on behalf of the Government of British Columbia by Mr. Newton H. Crittenden, and containing graphic descriptions of their geographical position and extent; the general features of the coast; the passages, inlets and channels; the bays, harbours and sounds; the resources in fish, &c., &c.

In 1886, the Fisheries Department, organized at that time as a separated department, fitted out, at a cost of over \$3,000, an expedition for the purpose of locating the ground of the *Skil* and other deep sea fish around the coasts of British Columbia. Owing to the late period of the year in which this expedition was undertaken, it was found impossible to make it as complete as would have been desired, but sufficient information

was gathered to establish the fact that the coast of British Columbia offers every inducement for a colony of fishermen.

Enquiries from parties since received by the department show that public interest is beginning to awaken on the subject.

It was reported that in 1888, during a prospecting voyage for *Skil*, the schooner "Theresa" secured 314 brls. of fish in about eight days' fishing, although she was provided with but very imperfect gear and met with boisterous weather. Trawls of 300 hooks, after being set for only two or three hours, were taken up with 100 or 150 fish averaging about 10½ lbs. each; thus showing that under favourable circumstances, this fishery could be made highly remunerative.

A number of firms have been examining fishing stations at several points on the coast with the intention of prosecuting this fishery in suitable boats from shore; and the annual report for 1888 states that this would be a proper thing for the Scotch crofters to engage in, as no more suitable place for carrying on deep-sea fishing can be found than the west coast of Queen Charlotte and Vancouver Islands.

During the past year, Colonel Engledue, R.E., in company with Major William Clarke, representing an English syndicate interested in the promotion of a company for the establishment of a fishing settlement, on the west coast of British Columbia, to be composed of Scotch crofters, visited British Columbia for the purpose of obtaining information regarding its fisheries. In order to afford these gentlemen every possible assistance in their mission, the Government steamer "Sir James Douglas," was placed at the disposal of the Government of British Columbia for the purpose of making an exploratory survey.

The report subsequently published by Colonel Engledue and Major Clarke on the result of their investigations, which appear to have been very thorough, deals with the question at length.

After stating the nature of their mission, and the details of the scheme of crofter colonization, the report alludes to the work proposed to be undertaken by the company, provided the Government of British Columbia offers sufficient co-operation. Their plan includes the erection of refrigerators for fresh fish at certain points contiguous to the fishing settlements and the employment of special steamers of high rate of speed containing refrigerating machinery for the transport of fish from outlying depôts to the different market towns and railroad centres. Arrangements would also have to be made for preserving, by the best known methods, the surplus catch of fish; for the providing of plant to undertake the extraction of oil from fish; for the manufacture of cod liver oil, and for the manufacture of fish guano.

The exploring cruise of the "Sir James Douglas" occupied about three weeks and covered a route practically uninhabited except by a few scattered Indian tribes. The harbours are described as being safe and abundant, and in most cases are within easy reach of the fishing banks. The presence of fish in these waters was fully proved; the published statement regarding the piscine wealth of British Columbia was found to be in no wise exaggerated, and the commissioners are of opinion that no better location can be found for trained deep-sea fishermen than the coast of British Columbia.

#### THE FRASER RIVER FISHERIES.

The difficulties which this department experienced in past years, regarding the enforcement of regulations for the protection of the salmon fishery of the Fraser river were again met.



The members of the Canners' Association sent a long remonstrance. For convenience their recommendations are summarized and dealt with under separate headings :

1. That the limit on fishery licenses be removed and that each cannery now in operation, be granted not less than twenty-five boat licenses.

The cannery's contention is that under the present system many, if not all, of the existing canneries, will have so few boats that they will be unable to continue their business with profit.

On the other hand, the department believes that to grant the cannery's request would create a monopoly. It would also mean that an increase should be made in the gross number of 350 licenses to cannerys, which has been established by the department after consultation and agreement with the cannerys themselves. Taking the year 1890 as a basis, there were seventeen factories on the Fraser, which at twenty-five boats each, as now asked, would run the whole number up to 425, instead of 350, as established in 1889, and as the total limit of licenses available for cannerys, freezers and fishermen is 500, this would leave only 75 licenses available, instead of 150, and in that manner the cannerys would gain some 20 per cent and the other fishermen would lose 50 per cent of the license privilege hitherto granted them.

2. That the fees on the Fraser shall be uniform, viz., \$20 for each boat engaged in fishing, without reference to the disposal of salmon ; and that for northern localities, the licenses be rated at \$5 for each boat.

3. That the weekly close time be the same as heretofore, that is to say, from 6 a.m. Saturday till 6 p.m. Sunday.

There being no objection to this request, it was granted.

4. That the restrictions as to the use of seines shall not be universal, and that certain waters be exempted.

This was, in a certain measure, agreed to, and certain localities, such as Alert Bay, Smith's Inlet and Lowe Inlet, where it was shown that no other mode of fishing could be carried on than seining, were exempted from the above order.

5. That the suspension of the clause of the statute which prohibits the throwing of fish offal into the water be continued.

The contention of the cannerys is that compliance with this requirement of the Fisheries Act would injuriously affect the industry, while not in the least conserving the source of supply. It was, moreover, claimed that this offal was immediately consumed by millions of scavenger fishes, such as suckers, bull-heads, &c. ; that it did not in the least injure the river, because it did not remain in the river as offal, and that even if a little did, the water was so cold that it could do no harm.

That the prevention of offal being cast into streams is a wise provision and almost universally adopted the world over, is admitted by every one conversant with the subject of protection of fish. The practice is pernicious from whatever source it may be viewed, either as regards pollution of the waters, injury to the fisheries or as regards the convenience and health of the residents along the shores of rivers where this offal is dumped into the water.

On this point, Mr. Mowat, the late inspector of fisheries for British Columbia, was very pronounced. He calculated that fish offal to the extent of 6,000,000 or 7,000,000 pounds go into the Fraser during a period of thirty days, within a distance of fifteen miles, and he asks if any one has ever calculated the immense number of small fishes it would take to dispose of all this refuse ? Chubs and suckers are noticed in large num-



bers under the cannery wharves, but these fish feed only on the blood and fragments of the salmon. As none of these fish weigh more than half a pound, it may be imagined the length of time it would take to eat upwards of 7,000,000 pounds of offal annually. Settlers using the water of the river complain bitterly of the pollution caused by this offal, as it is carried into the creeks and bays with the tide, and deposited on the banks near their residences. The stench from the offal confined under the canneries is represented as very great, lasting for months after the packing is over.

It is, moreover, much to be regretted that due attention has not been given to the importance of converting this refuse into manure. The value of this substitute for guano is worth consideration. The objection hitherto raised is the want of capital to enter into this industry, coupled with the uncertainty of finding profitable markets for the manufactured article; but it is considered that were the British Columbia Boards of Trade and the canning companies to take the lead in such a matter, much good might be done, and a practice which is justly termed a nuisance to the residents and a detriment to the fishing interests, would be dropped.

The use of fish as a manure has long been known. In France, as well as in some parts of the United States, the offal from fish, when converted into portable manure, is applied to the soil with great benefit; and no doubt can be entertained, but that the manufacture of fish guano on the Fraser River, and elsewhere in British Columbia, would prove a source of profit, and that large quantities of a most valuable concentrated manure could be exported at remunerative prices.

6. That a Board of Fishery Commissioners, resident in the province, shall be appointed by the Department of Marine and Fisheries.

In connection with this matter of fishery regulations for the Fraser River, it may not be out of place to quote here an article which recently appeared in the *Fishing Gazette*, of New York, as showing the absolute necessity which exists for the enforcement of judicious restrictions so as to ensure the protection of the salmon fishery:—

#### “COLUMBIA RIVER FISHERIES.

“As in other parts of the country, the Columbia River salmon fisheries begin to show the effects of greed and reckless destruction of that prince of fishes. In 1883, the value of canned fish was \$3,147,000. In 1890, the value was reduced in consequence of the lack of fish, to \$2,200,000. This is owing to the fact that *the most exhausting methods of capture are adopted*. In 1890, there were 165 fixed nets so constructed that but few fish could escape them. They were set in the estuary and occupied several square miles of fishing ground. Wheel fishing is adopted far up the river. On the rim or periphery of the wheel, scoop nets of wire are placed so as to scoop up the fish, and are so constructed as to lead the fish to troughs extending to a trap. So destructive are they that not a fish escapes. They literally pump the fish out of the river. As a consequence, the industry has declined about one-third since its height in 1883, and the state governments do not properly interfere.

“A protective union has been formed, whose object is to secure legislation by which fixed nets and wheels shall be removed, and such measures adopted that the salmon shall not, like the buffalo, become an extinct race. The union is striving to procure ‘besides’ such restrictions and protections as are needed for the establishment of hatcheries that will produce 30,000,000 fry every year, and thus keep alive the industry by which the whole country and foreign nations will be supplied with a valuable food fish.

"But few persons are aware of the magnitude of the salmon industry on the Pacific coast. There are twenty-four canning establishments on the Columbia River, ten on the Oregon coast, nine in California and thirty-six in Alaska. There are also thirty canneries located in British Columbia. The industry, not including British Columbia, has sprung up within a quarter of a century, which now has a capital of \$5,000,000, gives employment to 15,000 persons and has put up and sent out over the world 760,000,000 pounds of salmon. This is a vast addition to the world's food supply. It is to be hoped that local governments will protect these vast fisheries and render them by their fostering care still more productive. Our dependence now is upon the Pacific coast. The salmon fisheries near Newfoundland are not protected, but netters sweep in everything at the mouth of the rivers, which is a ruinous process. Our inland creeks and rivers that once afforded large numbers are now barren, because of dams that shut the salmon from their spawning grounds and also the deposit of chemicals from factories located on the streams.

"It is clearly the province of the government of the United States, which is doing nobly so far as its jurisdiction extends, and especially of the local governments, to protect and foster an industry so important, and especially as the limits for patronage are contracting and beef and mutton are increasing in price. The sea, which furnishes the food without man's help, should be utilized by protection and hatcheries. No food can be obtained more cheaply than that furnished by the sea, which covers two-thirds of the earth's surface. It should be remembered that dominion was given to man over the fish of the sea as well as over the beasts of the field and the fowls of the air. The department of the sea has been neglected too long, and the attention of individuals and of the governments is being called to the matter, which should be diligently heeded."

#### CONFERENCE OF FISHERY INSPECTORS.

It was deemed expedient to assemble at Ottawa the several inspectors and chief officers of the fisheries service throughout the Dominion, for the purpose of conferring upon the many questions relative to the fisheries. The mutual benefit of such a conference, both to the department as well as to its officers, is apparent. The inspectors were convened in conference on the 9th April, 1891.

In response to a request from this department, the Department of Railways and Canals kindly provided passes for such of the inspectors as were obliged to travel by Government railways to reach the capital, and through the kind offices of the Department of Public Works, a large and commodious committee room was placed at the disposal of these officers; and there from the 9th to 16th April, the conference met daily for deliberation under the presidency of Commander Wakeham, fishery officer, in charge of the Gulf division, Quebec. The following officers attended the conference:—

Dr. W. Wakeham, fishery officer for the gulf division, Province of Quebec, chairman.

Lieutenant A. R. Gordon, R. N., commander of the fisheries protection service eastern maritime waters;

Mr. Á. C. Bertram, inspector of fisheries for the Island of Cape Breton;

Mr. Robert Hockin, inspector of fisheries for the Pictou division, Nova Scotia;

Mr. J. R. Kinney, inspector of fisheries for the Yarmouth division, Nova Scotia;

Mr. Edward Hackett, inspector of fisheries for the Province of Prince Edward Island;

Mr. Robert A. Chapman, inspector of fisheries for the northern division of New Brunswick;

Captain J. H. Pratt, inspector of fisheries for the western division of New Brunswick ;

Mr. David Morrow, inspector of fisheries for the central division of New Brunswick ;

Mr. Alex. McQueen, inspector of fisheries for the Province of Manitoba ;

Mr. F. C. Gilchrist, inspector of fisheries for the North-West Territories ;

Captain E. Dunn, commander of the fisheries protection service on lake Huron and Georgian Bay ;

Mr. Charles Wilmot, officer in charge of the Newcastle Fish Breeding Establishment.

Owing to the recent death of Mr. Thomas Mowat, the Province of British Columbia was unrepresented at the conference.

Mr. Samuel Wilmot, superintendent of fish culture for the Dominion, frequently attended the sessions of the conference and participated in its deliberations. An employé of this department attended as secretary and kept a stenographic record of the proceedings.

The recommendations made by the conference were as follows :—

#### SUMMARY OF RECOMMENDATIONS MADE BY THE CONFERENCE.

1. Mr. Superintendent Wilmot's views, as expressed in his special report on the salmon fisheries of British Columbia, were endorsed.

A commission has been appointed to enquire into and report upon the fishery regulations of British Columbia.

2. That a close time for shad be established for Quebec, Nova Scotia, New Brunswick, and Prince Edward Island, from 1st March to 20th June, with weekly close time, as at present.

The regulation now in force provides a weekly close time for shad and gaspereaux from sunset on Friday evening to sunrise on Monday morning ; the fisheries within the harbour of St. John, N.B., being, however, exempted from the above provision.

It is held by many who have given this subject serious attention, that the above close time is insufficient to properly protect the shad fishery ; and it is also claimed that the exemption of St. John harbour from even this slight protection afforded by the weekly close time, is most injurious to the shad fishery in other localities.

The Bay of Fundy, with its tributary rivers and streams, is *par excellence* the shad fishing ground of the Dominion. In 1890 the catch amounted to 6,438 barrels, valued at upwards of \$65,000. Of this quantity nearly one-half was taken in the county of St. John, N.B., almost altogether in the harbour of St. John.

Throughout the Dominion the catch of shad in 1890 was :—

Fresh shad.....	108,103 lbs.
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Pickled shad.....	6,728 brls.
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representing an aggregate value of upwards of \$73,000.

At various periods during the present century, the condition of the shad fishery became a source of much uneasiness and concern to the fishermen of Nova Scotia and New Brunswick. It has periodically, but at uncertain intervals, proved a total failure, but again and again the fish returned to our shores in abundance ; and it was not until comparatively recent years that this fishery has showed continued signs of depletion,



and the urgent necessity of more stringent regulations forced itself upon the convictions of all observant and thoughtful fishermen.

In 1875 the value of the shad fishery of the Dominion reached \$133,375.20. In 1880 it stood at \$89,429.15. In 1884 it fell to \$74,058.41, but rose during the following season of 1885 to the phenomenal value of \$149,174.90. In 1886 it fell to \$109,896.60; in 1888 to \$70,355, and in 1889 to \$58,364.80.

With an increasing scarcity, the price of this fish gradually rose until what was not very long ago an important article of diet among the poorer classes of the population, has now become comparatively scarce. The fish which sold at \$6, \$7 and \$8 a barrel, now fetch \$12 and \$14.

The shad is essentially a salt water fish. Its annual migrations northward and into the mouths of our rivers have been ascribed to various causes, the most acceptable theory being that there is a certain temperature of the water in which fish of migratory instincts prefer to live, and that they aim to occupy a hydrothermal area of this special temperature; hence the movement of those fish in the spring months and early summer from the warm waters of the Atlantic off Florida and South Carolina as far north as the Gulf of St. Lawrence.

Shad enter the Bay of Fundy about the middle of May, proceeding up the rivers and streams and returning to the salt water in August or by the latter part of July. They are then thin, emaciated and weak, after spawning. The young ones move down to the sea in September.

The main argument advanced by the St. John Harbour fishermen for an exemption from the present regulations is that the first run of shad lasts but a few weeks, and that were they prohibited from catching them at that time, very few fish would be taken, and great loss would ensue to the fishermen of that locality.

On the other hand, the Bay of Fundy fishermen ascribe the poor runs of shad which have been experienced in past years to this very exemption, alleging that the fish are taken in such immense numbers, and scared by the extensive operations at St. John, that few remain to reach the upper waters of the bay, and thus their catch is considerably diminished. They, moreover, claim that the fishery has become so exhausted that increased protection is absolutely necessary, and that a regular close season should be established, in addition to the present close time, during which no shad or gaspereaux should be caught; no exceptions whatever being made for any localities.

In a special report dated April, 1890, upon the condition of the shad fishery at the head of the Bay of Fundy, with special reference to the counties of Cumberland, Colchester and Hants, Inspector Hockin says:—

“The history of this fishery since the year 1878 has been one of rapid decline; the total catch for the three years, 1878, 1879 and 1880 being 19,755 barrels; for 1881, 1882 and 1883, 13,037 barrels; for 1884, 1885 and 1886, 6,192 barrels; for 1887, 1888 and 1889, 1,777 barrels.

“This decline is due to over-fishing—to the feeding grounds being exhausted—or to some interference with the reproduction of the fish.”

Inspector Venning, of New Brunswick, said in 1888:—

“The cause of the decline is to be found in over-fishing, which continues without intermission from 1st June to last October, and no improvement can be looked for while this over-fishing is carried on.”

Overseer James S. Miller, of Canning, N.S., says :—

“With regard to the general falling off in the shad fishery in the waters of the Bay of Fundy, there is a local cause which I think must affect the fishing injuriously : I refer to the practice of drifting for herring across the mouth of the bay. Usually, every summer, from six to eight vessels, each having at least two sets of nets, string them two or three tiers deep right across the mouth of the bay. It appears to me that this practice must have the effect of breaking up the schools, or turning them away, when they go up through the Gut ; they are thus lost to the bay.”

Overseer Burnham, of Windsor, N.S., writing on the subject says :—

“I believe that over-fishing is the principal cause of the decline of shad in the Avon.”

Mr. W. H. Rogers, late inspector of fisheries for Nova Scotia, made several reports on this subject ; the gist of his remarks and conclusions being that over-fishing was the real cause of the scarcity of the shad at the present time.

Among several authenticated statements presented to the department in connection with the decline of the above fishery in the Bay of Fundy, may be mentioned the following :—

Casimir Bourque, of Minudie, fished in

1882	with	8	nets and caught	150	half brls. of shad.
1883	do	8	do	100	do do
1884	do	8	do	70	do do
1885	do	16	do	60	do do
1886	do	16	do	30	do do

Wm. A. Downey, fisherman, also of Minudie, states that in 1882, his average catch per net used each tide, was 55 shad.

In 1883 it was only	10
1884 do	6
1885 do	4
1886 do	3
1887 do	3

From the above statements, and reports, it is evident that the shad fishery has much retrograded of late years, and it appears most desirable that efficient measures be adopted to give it the necessary protection. The whole subject is still engaging the earnest attention of the department.

3. That a close time for speckled trout, sea trout, and land-locked salmon in the Maritime Provinces be fixed from 1st September to 1st March ; in non-tidal waters in Province of Quebec from 15th September to 1st May, and in tidal waters in the same province between 1st October and 1st March.

This is apprehended would only complicate matters, as it would be difficult, if not together impossible, to distinguish between trout caught in tidal and non-tidal waters.

It is a matter for consideration whether it is not better for all practical purposes to make the close season uniform, say from 15th September to 1st May.

The close seasons for speckled trout (*Salvelinus fontinalis*) are now as follows :—

Ontario, 15th September to 1st May ; New Brunswick, 15th September to 1st May ; Manitoba and the North-West Territories, 15th September to 1st May ; Quebec, 1st October to 31st December ; Nova Scotia, 1st October to 1st April ; Prince Edward Island, 1st October to 1st December ; and those for the large grey trout, “lunge,” or

land-locked salmon : Quebec, 15th October to 1st December ; Nova Scotia, 1st October to 1st April ; New Brunswick, 15th September to 1st May.

4. That the close time for whitefish, viz. :—15th October to 30th November—be made to apply to Quebec and the Maritime Provinces, and that the close season for Manitoba and the North-West Territories remain as at present, with a special close time for Long Lake in Assiniboia, from 1st November to 15th January.

The first part of this recommendation has already been carried out ; the close season being from 15th October to 30th November. There does not appear to be any occasion to make special provision for Long Lake. If, as claimed by Inspector Gilchrist, a longer period is required there for the protection of fish, the object in view can be attained by declining to grant licenses until a certain time.

5. That a close season for sea bass for the Maritime Provinces be fixed between 1st March and 1st October.

This is the law at present, so far as Nova Scotia and New Brunswick are concerned : it should be extended to Quebec.

6. That the close season for pickerel, in Ontario, viz. :—15th April to 15th May, be made applicable to the waters of the Dominion.

This is the law in Quebec, as well as in Ontario. Pickerel are not caught to any extent in the Maritime Provinces.

7. That the close season for maskinongé, 15th April to 15th June, be made applicable to Manitoba and the North-West Territories.

A report on this subject is now under consideration.

8. That the close time for gaspereaux be established from sunset on Thursday evening to sunrise Monday morning in each week.

This is under consideration.

9. That the use of purse-seines in Canadian territorial waters be prohibited.

Purse-seines are now prohibited by law.

10. That no mackerel nets be left set in the territorial waters of Canada between 9 a. m. and 5 p. m., between the 1st June and 1st September in each year ; provided the weather is such that it is possible to attend to them.

A regulation embodying the above recommendation has been adopted.

11. That the use of trawls or bultows be not allowed during the night in the bays within two miles from shore.

The evidence touching the necessity for this regulation is conflicting, and it was deemed more advisable to suspend action.

12. That all buoys attached to fishing apparatus in the tidal waters of Canada be marked with the owner's name, or some mark registered with a fishery officer or officer of customs.

Under consideration.

13. That an area swept by a radius of 7 miles from Wedge Island Lighthouse, N. S., be set apart as a spawning ground for herring ; no nets to be allowed in this area between 1st October and 15th November, except those specially licensed to resident fishermen, with no more than 1,000 square fathoms of net to each boat owned on the coast of this district.

This might be tried. A similar reserve of spawning grounds at Grand Manan has undoubtedly been productive of most beneficial results.



14. POUND-NET *vs.* GILL-NET FISHING.*Report of the Fresh-Water Fish Committee.*

"Your committee, after listening carefully to the reading of Mr. Charles Wilmot's report upon the question of pound-net *vs.* gill-net fishing (*see* p. 85, Fisheries Report, 1890); from personal experience in the matter, and after a full discussion upon the relative merits of these appliances, recommend as follows:—

(1.) "That a pound-net of proper dimensions—say 4 inch mesh for the pot, 6 inches for the leader—is not so destructive as the present system of operating gill-nets.

(2.) "The pound-net is a stationary engine, whereas the gill-net can easily be removed from feeding to spawning grounds, and by this means seriously interfere with natural propagation. The fish when taken from the pound-net are alive and in first-class condition, whereas with the gill-net they are often from necessity left in the water too long and thus become unfit for use.

"The gill-net captures large numbers of immature salmon trout by the teeth; but the pound allows them to pass through uninjured.

"The gill-net allows suckers and mullets to pass through the mesh, whereas large numbers of these inferior fish are caught by the pound-nets."

NOTE.—Suckers and mullet live largely upon the eggs and fry of whitefish and salmon trout.

*Recommendations.*

(a.) Your committee would recommend that a limited number of pound-net licenses be granted to the fishermen of the Province of Ontario. The mesh not to be less than 4 inches extension measure in the pot, pound, hearts or tunnel, and 6 inches in the leaders.

(b.) For Manitoba and the North-West Territories, where the adult and marketable fish are larger, the mesh for pot, pound, heart, or tunnel should not be less than  $4\frac{1}{2}$  inches and 7 inches for the leader.

(c.) That the number of licenses issued, and the localities where the nets are to be placed be left to the discretion of the inspectors of the respective districts.

(d.) That pound-nets be not placed nearer than a mile of each other; that the length of leaders for each net be fixed by the inspector, and that no double-headed pound-nets be allowed.

(e.) That gill-net fishermen operating in the Province of Ontario from 3,000 to 6,000 yards of net shall pay an annual fee of \$10, and for a less quantity a fee of \$5, and that the license for fishing tugs remains as at present, viz., \$25.

(f.) That the fee on a boat license in the Province of Manitoba and the North-West Territories (the limit to be placed at 6,000 yards) shall be \$10. The fee on licenses for fishermen using 400 yards or less of nets to be \$2 per annum, and for each additional 400 yards \$2 more.

(g.) That Indians (fishermen) in Manitoba and the North-West Territories shall have no privileges over and above those granted to whitemen, when fishing for market.

(h.) The committee also recommends that a system of registering fishing nets, buoys, and boats be adopted, and that the Department of Fisheries issue tags or checks to the inspectors for that purpose. That no fisherman fishing with gill-nets in Ontario, Manitoba and the North-West Territories, be granted a license to use pound-nets. He must restrict himself to either of these methods for capturing salmon trout and whitefish.

Most of the above recommendations are covered by the regulations governing fishing in Manitoba and the North-West Territories. The others are still under consideration.

15. That certain closed areas should be set aside and protected for the natural propagation of lobsters; such areas to be defined and approved by the several inspectors in each of the districts affected, but not to exceed 20 per cent of the coast.

This recommendation requires special and careful investigation before it is adopted. When the proposed lobster regulations are in force, it is expected that such a measure will be found unnecessary.

## 21. LOBSTER FISHING.

### *Recommendations in Detail.*

The Committee on Deep-sea Fisheries report as follows:—

They have considered several propositions submitted by members of the convention for the regulation of the lobster fishery, to wit:

A proposition to subdivide the coast waters.

It was resolved to recommend that the district limits remain as now established. The proposition that district No. 2 be divided, the boundaries being fixed by this conference, was negatived on the following vote:

For: Messrs. Gordon, Bertram and Pratt.

Against: Messrs. Hackett, Chapman, Wakeham and Kinney.

A proposition that: In each district, during the season in which it is lawful to pack or can lobsters, the regulations size shall not apply to lobsters delivered at any cannery, but that this fishery be regulated by limiting the season during which it would be lawful to take lobsters, was negatived on the following vote:

For: Messrs. Gordon, Chapman and Hockin.

Against: Messrs. Wakeham, Pratt, Bertram, Kinney and Wilmot.

It was also recommended that the close season remain as it is at present.

It was resolved to recommend that no person or persons, or body corporate, shall be permitted to pack, can, preserve, or cure lobsters without taking a license.

It was resolved to recommend that the license be free.

It was resolved to recommend that all boats and trawl-buoys used in connection with the lobster fishery, all "cars" for the keeping of lobsters alive, shall have the name of the owner, or a mark for identification, indelibly cut, or branded thereon, which mark shall be registered with a fishery officer.

It was resolved to recommend that:

In each district during the season in which it is legal to pack, can or otherwise preserve lobsters, the regulations prohibiting the capture of female lobsters carrying exuded ova, shall not apply to any lobsters delivered at a cannery, when the proprietors of such cannery fit up and operate to the satisfaction of the department, boxes for the hatching out of such ova as may be taken from the female lobsters, delivered at the cannery; such boxes to be of the pattern approved by the Superintendent of the Fish Culture for the Dominion.

It was resolved that:

The penalty for fishing during the close season be fifty dollars for each offence, and in addition thereto, a penalty of one dollar for each lobster caught, and in default of payment of the fine, imprisonment up to three months.

That the penalty for fishing, buying, killing or having in possession lobsters under a regulation size be twenty-five dollars, and in addition thereto, one dollar for each lobster; and in default of payment, imprisonment up to two months.

That the penalty for having "berried" lobsters in possession, &c., &c., be twenty-five dollars for each "berried" lobster, and in default of payment, imprisonment up to three months.

Nothing in the foregoing to be held to deprive a fishery officer of his discretionary power as contained in section 18, sub-section 1 of the Fisheries Act.

Whereas it is the practice of certain Canadian canners to export the product of their canneries either without labels or labelled as the product of the United States; that the attention of the department be called to this irregularity, and that the Government be asked to take such measures as may be best to put a stop to such practice.

It was resolved to recommend that canners be required to label all cases packed by them in season with a label issued by the department, stamped by a fishery officer,

signed with his name and a letter to identify the factory to which it is issued, or that such cases be branded or stencilled and signed in such a way as to be identified as legally packed, and that all cases not so labelled or marked be liable to confiscation.

It was resolved that with a view of carrying out the regulations affecting the lobster fishery where necessary, additional wardens or guardians be employed, and that inasmuch as the following is the estimate of the several fishery inspectors for their respective divisions, it is recommended that the special assistance asked for be granted :—

In Mr. Bertram's district.....	\$200
Dr. Wakeham's do .....	200
Mr. Kinney's do .....	100
Mr. Chapman's do .....	400
Mr. Hockin's do .....	300
Mr. Hackett's do .....	200
Capt. Pratt's do .....	Nil.
Mr. Morrow's do .....	Nil.
Total.....	<u>\$1,400</u>

It was resolved that as a better means of carrying out the lobster fishery regulations, it be recommended that the nomination of special or temporary fishery officers be at the discretion of the inspectors.

Regulations affecting the lobster fishery are under consideration of the department.

16. That certain particular areas be established in Lake Winnipeg and the waters connected therewith, for which no license shall be issued for commercial fishing, *i.e.*, an area of three miles by three in front of the mouths of certain rivers.

This recommendation has been carried out.

17. That no person be allowed to fish with a spear and torch in or about any river, stream, estuary, or watercourse, between the 1st May and the 15th November of each year.

The spearing of certain fish is already prohibited by the Fisheries Act. The object of this recommendation was to prevent the spearing of salmon under pretense, for instance, of catching eels, as in Prince Edward Island.

18. That the use of the spear for taking fish be prohibited in Manitoba and the North-West Territories, provided that the Minister may permit spearing by Indians for domestic use.

The same remarks as above apply. In the North-West Territories, they spear pickerel and trout under pretense of killing suckers and jackfish.

19. That the license fee for traps in tidal waters be fixed at 50 cents per running fathom of leader used.

The fee for trap-nets is fixed at 50 cents per fathom of leader.

20. That a standard salmon net be adopted as per drawings attached, and that the license states the size of mesh, length of bar-net and wings.

Mr. Wilnot has this matter under consideration.

21. This recommendation deals with the question of the lobster fishery, and forms the subject of a separate paragraph in this report.

22. That all net fishing be prohibited in the non-tidal waters of the River St. Croix and lakes on the New Brunswick side of the international boundary line.

A recommendation of this nature cannot be carried out except with the co-operation of the authorities of the State of Maine. A paper covering this and similar subjects has been prepared.



23. That a close season be fixed for pickerel in New Brunswick, Nova Scotia and Prince Edward Island between 15th April and 1st July.

Some recommendation as No. 7.

24. That no salmon net be set in the tidal waters of Canada without first obtaining a license therefor.

This is under consideration.

25. That the fee for salmon nets in the tidal waters of Canada on the eastern coasts be at the rate of three cents per running fathom ; both bar-net and wings to be measured.

This is now the rule, so far as Bay des Chaleurs is concerned.

26. That the new system of special guardians inaugurated by the department has been successful in its operation, and that it should be adopted as far as possible ; but, that all guardians so appointed be granted the status of constables.

No particular remarks required.

27. That the system at present in force requiring certificates for the shipment of fish during close seasons be strictly adhered to in all cases, and that it be extended so as to apply, as far as possible, to all common carriers.

This is an opportune recommendation and it is strictly carried out so far as this department is able to do so.

28. That it is desirable that a survey be made of all oyster beds in Canada in accordance with regulations furnished by the Department of Fisheries.

Being attended to.

29. That no fishing for oysters be permitted without the parties so doing having first obtained a license from the Minister of Marine and Fisheries.

Licenses for exclusive rights of fishing are now granted to parties desiring to engage in oyster culture ; the general public may, however, take oysters without any special license during the open season.

### 30.—FISH CULTURE.

Artificial fish culture has been a success as regards whitefish, salmon trout and shad, and a partial success in the case of salmon. The conference recommends the continuation of the present system along the lines where success seems obtainable, but that no fry be planted in any water unless it be clear of obstructions and in a proper condition to perpetuate the species.

A very good suggestion, which is now carried out.

### 31.—FISH-WAYS.

That wherever a "natural" pass in a river can be maintained, either by building a wing dam or by making a channel, such is to be preferred to any wooden fish pass. The conference having examined the Hockin pass believes it to be correct in principle, and recommends that it be fully tried.

There can be no doubt that natural means are preferable to artificial passes, however improved the latter may be.

### 32.—PROCURING SALMON OVA.

That in the collection of salmon ova, the supply of parent fish be obtained as far as possible by purchase from fishermen during the open season and impounded till ripe.

This is done whenever possible.

33. Sawdust in rivers and streams. That no exemption be permitted under clause 15, subsection 2, of the Fisheries Act.

The Bill providing for this was not proceeded with during the session of 1891.

34. That no manure or wash, or excrement of animals be thrown into, or allowed to drift into any stream, under the penalties of clause 15 of the Fisheries Act.

The Fisheries Act already prohibits the throwing or depositing of matter or substances deleterious to fish. Deposits of manure or dead animals are matters for municipalities to deal with, when they constitute a public nuisance. The present recommendation was intended to apply to the North-West Territories, where huge stables have been built on the banks of streams.

35. That a standard package should be adopted for pickled fish in Canada (mackerel excepted).

The laws relating to Inspection of fish and fish oils is at present under control of the Department of Inland Revenue.

### 36.—OYSTER FISHERY.

Final recommendations in detail :—

(1.) That no fees be charged for licenses.

(2.) The close time to be established between 1st May and 30th September, both days inclusive, and that in all partially depleted beds, no fishing in the winter season through the ice be allowed.

(3.) Oysters “round” under two inches in diameter, and “long” under three inches of outer shell shall not be taken.

(4.) All productive oyster beds to be divided into sections and to be fished alternately.

(5.) The department to take the necessary measures to restock exhausted beds, and leases and licenses to be granted to parties willing to undertake oyster cultivation.

(6.) Mud-digging to be prohibited within 200 yards of any live oyster bed, and permitted only at such places as are prescribed by a fishery officer.

The oyster fishery has been partially brought under the license system. The close season is now from 1st June to 15th September. Fishing through the ice is no longer allowed. However desirable a minimum size may be, it would be difficult and expensive to enforce such a regulation. The department intends restocking exhausted beds and encourages operations of the same nature when undertaken by private parties. The regulations provide for the digging of mussel mud.

37. That all Canadian fishing vessels which take out a license for the bounty shall, before receiving such license, have some distinctive mark, such as a St. Andrew's cross, made of tanned cotton canvas, sewed on each side of her mainsail; such cotton to be not less than 10 inches in width, and the arms of the cross not less than 5 feet long.

So far as the bounty is concerned, no benefit would be derived from this recommendation, but it would no doubt be found invaluable to the fisheries protection service, as the commanders of the cruisers would know at a glance the nationality of the vessel engaged in fishing, and be saved much labour and annoyance.

38. That officers distributing bounty claims be empowered to administer the oath to bounty claimants.

Fishery officers have now the power to administer oaths to bounty claimants, under chapter 42 Revised Statutes. The Act was assented to on 28th August, 1891.

39.—*Re* STATISTICS.

That in fixing the values shown in the Dominion fishery returns, the price should be that of the fish when sold by the merchant, at the point where he received them from the fishermen.

And further, that each fishery inspector make a special report on the average value in his district, such report to be made to the department in August of each year ; and the final values for the returns to be fixed by the department on the receipt of these reports.

A schedule to serve as a basis in preparing the statistics of the annual report is prepared in the department, and sent every year to each inspector for revision. It is quite possible, however, that the scheme would work better as proposed.

40. That in the Dominion fishery returns, the take made by registered vessels be distinguished from that by boats.

Instructions to such effect might be given to the inspectors, calling upon them to direct overseers in their respective districts to prepare statistics in such a manner as to distinguish the catch of vessels from that of boats. Blank forms would have to be altered accordingly.

41. That no herring or capelin be captured for fertilizing purposes.

A very good suggestion.

42. That the matter of provincial and county regulations be referred to the several inspectors for the purpose of making enquiries and reporting later to the department.

43. That the close time for fish be made statutory.

This suggestion does not commend itself. The seasons are more or less tentative of necessity.

44. Changes recommended in the Fisheries Act :—

Section 12, subsec. 1.—That all the words after the word *killed* in the 3rd line be erased, and the word *illegally* substituted therefor ; and that in subsec. 2, the language be altered in the same sense. Also, in subsec. 2, after the word *every*, insert the words *fishery officer* on the first line, before the words *customs officer*.

There appears to be no necessity to change ss. 1, sec. 12 ; it is sufficiently clear. Neither is it necessary to add the words *fishery officer*, as these officers are already empowered to seize and confiscate *on view* all fish illegally caught by sec. 18, ss. 3.

Section 13, subsec. 1.—That the words *fishery officer*, in the last line, be erased, and the words *fishery inspector* substituted therefor.

This would not answer, as there are, at present, no inspectors in Ontario and Quebec, besides an inspector is only a fishery officer.

Section 14, subsec. 10.—That the words *and those for sturgeon not less than 13 inches* be added thereto.

Unnecessary and unimportant.

Section 14, subsec. 12.—That the following be added to this subsection :—

“ And all brush weirs other than box traps, fascine, or eel weirs, shall be provided with gates not less than 8 feet in width, and of the full height of the weir, placed at the deepest part of the bunt.”

A good suggestion which might be carried out. O'Brien's patent fish escape would probably answer the purpose.

Section 14, subsec. 14.—That the last clause, commencing *provided always, &c.*, be struck out.

There can be no objection to this suggestion being carried out. It would give additional protection to the fisheries.



Section 15, subsec. 2.—That the last clause, commencing *provided always, &c.*, be struck out.

The proposed Bill *re* sawdust and mill rubbish will provide for this.

Section 18, subsec. 3.—That the word *boats* be inserted between the words *all* and *materials* in the first line.

Quite unnecessary ; difficulties have often arisen on that account.

Section 21, subsecs. 8, 9 and 10.—That the penalties for illegal lobster fishing, &c., be added to this section as subsections 8, 9 and 10.

This should be done only in case it be decided to increase penalties for the illegal killing and possession of lobsters.

45. That whereas certain Canadian fishermen on the great lakes are placed at a serious disadvantage in competing with those of the United States, owing to the imposition of a duty on fish of  $\frac{3}{4}$  of a cent per pound, it is desirable that the question be investigated, and such action taken as seems best calculated to place our fishermen on an even footing with their competitors.

This is a matter relating to tariff.

46. That whereas whitefish are very plentiful in certain of the smaller lakes of Ontario, and are not permitted to be taken with nets, licenses for fishing with gill-nets be granted for, say, 1st to 30th September, such licenses to be issued to farmers and other residents in the immediate vicinity of said lakes.

A recent circular to this effect had to be cancelled. It is, moreover, apprehended that the proposed dates would not answer, being too early.

47. That a manual of legal procedure be prepared and supplied to fishery officers for their guidance when acting as magistrates, and that in the meantime a copy of *Clarke's Magistrate's Manual* be supplied to each inspector.

Inspectors of fisheries are furnished with copies of the Consolidated Statutes *re* Summary Convictions. Some of them might be supplied with Clarke's Manual.

Resolutions respecting the services rendered by the secretary to the conference.

#### FINAL REPORT.

49. Reiterating that close seasons should be made statutory ; testifying to the value placed by all members of the conference upon meetings like the present, and their desire that such be repeated again. The proceedings have been well kept by the secretary, and the conference request that they be printed for private circulation, so that each member may be furnished with a copy.

As may be seen, the subjects dealt with by the conference extend over a wide range and embrace all of the most important matters coming within the scope of the Fisheries Department. That the great majority of the recommendations made at this convention were sound and practical is evidenced by the department's adoption of many of them, and although it is too early yet to express an opinion of the improvement in the fisheries which may result from their promulgation, it is not too much to say that the department feels confident of ultimate benefits to the fisheries through the introduction of some of the remedial measures suggested.

The final report of the conference reads as follows :—

OTTAWA, 16th April, 1891.

SIR,—By unanimous request of the conference of fishery inspectors, I have the honour to report to you on the work of the conference as follows :—

It is considered that the conference has been of great value, not only by enabling the inspectors from different districts to meet and exchange views, but the discussion of

the subjects has been of the greatest value in adding to the knowledge each member possessed. The privilege of meeting is felt by the members to have been so valuable to them individually that they unanimously recommend that the experiment so happily begun this year be repeated as often as possible. It is generally felt that the benefits of an annual meeting would amply repay the cost incurred.

A protocol of proceeding has been admirably kept by our secretary, Mr. Winter, of the Fisheries Department, and the request is made that this protocol be printed for private circulation so that each member may be furnished with a copy.

The subjects submitted for discussion have been dealt with, but the question under article 2 of the memorandum were found to be of so local a nature that each district inspector was requested to carefully go over the whole subject after the adjournment of the conference and to report directly to the department.

Of the other subject, the one deemed perhaps the most important by the conference was that of close seasons. These the conference recommends should, as a protective measure, be made statutory.

The protocol of proceedings having been kept in full, it will be unnecessary for me to say anything further as to the discussion of the subjects under review.

I am requested by the conference to convey to you a sense of their obligation for courtesies extended, and for the interesting and valuable address with which you opened the conference.

(Sgd.)

W. WAKEHAM,

*Chairman, Fisheries Conference.*

It is a matter deserving of consideration whether it would not be well to continue such meetings. The cost is not excessive, and the advantages thus gained in obtaining and contrasting the opinions of representative officers from various parts of the country upon points and theories at the same time are of great assistance in enabling the department to frame proper regulations, &c., for the protection and improvement of the fisheries, applicable to all parts of the Dominion.

#### FISH-BREEDING.

Detail statements of the work done at each of the fourteen hatcheries, together with the report of the Superintendent of Fish Culture, will form Part II of the supplement to the annual report of 1891.

#### CARLETON SALMON RETAINING POND.

For some years past the operations of the St. John River salmon hatchery have been very much restricted by the difficulties which have been experienced in procuring sufficient number of parent fish from which to secure the necessary ova to supply the hatchery. Numerous attempts had been made in the St. John River and its tributaries to obtain the required numbers of parent fish, and all met with but very indifferent success. It was found necessary, therefore, to draw the ova supply from other hatcheries, principally the Restigouche establishment.

This unsatisfactory state of affairs called for some remedy, and the department, as an experiment, adopted the suggestion of the Superintendent of Fish Culture, to utilize a salt-water pond on the Carleton side of St. John Harbour, known as the "Carleton mill-pond" for a reservoir to confine fish in until such time as they were ready for spawning.

It was held that this pond which was subject to the ebb and flow of the tide and consequently capable of receiving a fresh supply of water at each tide, was well adapted



for the purpose, while on the other hand some were of opinion that the drainage would render the water so impure as to defeat the end in view.

The high tides rise here some 28 feet and make this pond of very considerable size, while at low tide it is reduced to a comparatively small deep water hole with a surface area of 60 feet across and about 16 feet deep. By the construction of a dam and gate protected with a grating to prevent the fish from escaping which could be opened at the flow of the tide and closed when it began to ebb the pond could be kept full for all purposes required yet allowing the regular ebb and flow of tide to pass through the openings in the gate.

This work was completed for a comparatively insignificant sum, and parent fish were from time to time secured from the net fisherman's catch in the harbour by purchase and placed in the pond to ripen.

In this connection it might be well to reproduce an extract from an article which appeared in the *St. John Sun*, of 16th June last, as follows :—

\*            \*            \*            \*            \*            \*            \*

“The system now entered upon at the Carleton mill-pond, while as yet in its experimental stage, is favourably regarded by those who have given attention to the subjects of artificial fish culture. But the undertaking, whether ultimately successful or not, is a present gain to the harbour fishermen. To illustrate this point : say that 400 salmon are caught by the harbour fishermen, for which they receive much more than the regular market price ; that these fish are put into the Carleton pond and kept there till October ; that 200 are females from which about one million eggs are taken and sent to the up-river hatchery, what follows ? These 400 parent salmon minus a small percentage of loss from injuries, will be returned to the sea in as sound a condition as would be the case had they spawned up-river, and many of them as has been verified elsewhere will return again the following spring either for capture by the fishermen or for breeding purposes. Take the other side of the case, if these 400 fish had been taken by netters and sold at market prices, they would have been consumed and the eggs cast away as offal.

“No one will deny that the Government is moving in the right direction in its efforts to husband the fish wealth of the country, and that the present attempt to increase the stock of salmon in the St. John River is worthy of general support.”

When the time for manipulation arrived, the work was superintended by Mr. Charles McCluskey, the officer in charge of the St. John River hatchery, ably assisted by Fishery Overseer Joseph O'Brien, who had control of the pond from its inception. Mr. McCluskey subsequently reported the entire success of his operations and was loud in his praises of the splendid condition of the fish and the ova, which he pronounced to be healthier on the whole and in finer condition than any he had previously manipulated in all his experience. He handled 234 female salmon which had been taken from the pond from which he procured 1,600,000 eggs in prime condition. The ova were conveyed to the Government hatchery at Rapide des Femmes near Grand Falls, and placed upon the hatching trays. Advices show that the eggs are progressing favourably, and that there is every indication of good success attending the venture.

• THE RESTIGOUCHE SALMON ANGLING CLUB AND ITS GRIEVANCES.

This club, which is composed almost exclusively of American capitalists, was incorporated in 1884 by an Act of the New Brunswick Legislature. Its members purchased from the Local Government certain fishing privileges, besides acquiring a large number of riparian rights from the settlers. At the present time these gentlemen own



the exclusive control of a large proportion of the angling of the Restigouche and Metapedia Rivers.

Matters progressed favourably, and no grievances were entertained by the club until the season of 1891, when this department received a letter from the president of the club, urging that a net set by the department opposite Cross Point, for the purpose of capturing salmon to stock the Restigouche hatchery, completely barred the channel, and was set in such a manner as to impede the passage of fish to the angling pools above. It was also complained that the nets were not lifted from Saturday night to Monday morning, as provided by law, and that they were kept in operation during the whole season while the salmon was running up. In fact, the club insinuated that the scarcity of salmon in the upper reaches of the Restigouche that year was mainly attributable to the nets used by the department, and they feared if some remedial measures were not adopted they would be compelled to abandon the river and give up the fly fishing, in procuring which they had expended so much money.

Mr. Alex. Mowat, officer in charge of this hatchery, was instructed to report upon this matter, and the following is a brief synopsis of his statement :—

“On measuring the net spoken of by the anglers as having blocked almost the whole channel of the river, he found 48 fathoms of clear water, from one to five feet deep, thus giving the salmon ample chance of ascending the river to its head waters, and, under the authority granted by the Minister of Marine and Fisheries, he claimed that he was perfectly justified in using this means to secure an early and sufficient supply of ova for the Government hatchery. In further relation to the grievances of this club, Mr. Mowat shows that as only 56 salmon were captured in the Government net, fully one-half of the fish required from which eggs are taken having been purchased from the local fishermen and retained in the pond near tide head till ripe for spawning, the net in question spoken of as being so detrimental to the club's interests could not possibly have occasioned the scarcity of fish complained of in the upper portions of the river. It is also quite reasonable to assume that had not these parent fish been captured by the Government net, they would have been caught by other fishermen, and gone to market, leaving no crop of fry to be turned into the main Restigouche and its tributaries, where no doubt a large proportion of these will thrive and grow, thus giving the river abundant supplies of salmon for future years.

“The members of the Restigouche Club must have received erroneous impressions from persons purposely attempting to prejudice them against the artificial propagation of fish, and had they looked into the matter more thoroughly they would probably not have reported so unfavourably regarding the hatchery and its working appliances.

“It was pretty clearly shown that the salmon did not enter the Restigouche early in 1891, but had the anglers been on the river a little later in the season, when the fish did run, they would have had no reason to complain.”

Since this matter has been fully explained the anglers appear to look more favourably upon the work of fish-breeding on the Restigouche, since they talk of putting up a hatchery themselves. Should this be the case, it is to be hoped that some satisfactory arrangements will be entered into between the club and the department by which a supply of fish for manipulating purposes can be purchased from fishermen lower down the river, in tidal waters, or in Bay des Chaleurs, and impounded until ripe; thus avoiding all the trouble which has been raised by the capture of parent fish above tidal waters.

## THE BEHRING SEA QUESTION.

Her Majesty's Government and that of the United States have reached an agreement which is expected will lead to a satisfactory settlement of this long-standing and important question.

A short review of the principal features of the question is now in point.

## 1886.

In the summer of 1886, the United States revenue cutter "Corwin," seized in the Behring Sea far out from land, the British sealing vessels "Carolena," "Thornton" and "Onward," and also warned out of that sea the British schooner "Favourite."

These interferences with British vessels on the high seas were defended by the United States authorities on the ground that the vessels had committed a violation of the statutes of the United States prohibiting the killing of any fur-bearing animal "within the limits of Alaska territory or in the waters thereof."

The particular section of the statute is as follows:—

"Sec. 1956. No person shall kill any otter, mink, marten, sable, or fur-seal, or other fur-bearing animal, within the limits of Alaska territory, or in the waters thereof; and every person guilty thereof shall, for each offence, be fined not less than \$200 nor more than \$1,000, or imprisoned not more than six months, or both; and all vessels, their tackle, apparel, furniture and cargo, found engaged in violation of this section shall be forfeited; but the Secretary of the Treasury shall have power to authorize the killing of any such mink, marten, sable, or other fur-bearing animal, except fur-seals, under such regulations as he may prescribe; and it shall be the duty of the Secretary to prevent the killing of any fur-seal, and to provide for the execution of the provisions of this section until it is otherwise provided by law; nor shall he grant any special privileges under this section."

Proceedings were instituted in the District Court of Alaska against the seized vessels. They were condemned, and the masters and mates were fined and imprisoned.

The Canadian Government remonstrated against such arbitrary assumption of extraordinary authority over the high seas. Claims upon the United States Government to compensation for losses and damages occasioned by the action of their revenue cutters were duly made.

These remonstrances have as yet been fruitful of no result, so far as reparation for the wrongs inflicted is concerned.

## 1887.

In the following year (1887) the authorities of the United States persisted in an aggressive attitude toward Canadian vessels and further seizures were made and vessels otherwise interfered with when in the pursuit of their calling outside of territorial jurisdiction.

That year the British vessels:

"W. P. Sayward,"

"Grace,"

"Anna Beck,"

"Dolphin,"

"Alfred Adams,"

"Ada,"

were all seized by the United States revenue cutter "Richard Rush", and the schooner "Triumph" was ordered by the same vessel not to enter the Behring Sea.

The seized vessels with the exception of the "Alfred Adams," which escaped to Victoria, were all condemned in the District Court.

No opportunity was lost by the Canadian Government to represent to Her Majesty's Government the disastrous effect of this action on the part of the United States authorities towards Canadian sealing vessels.

Formal statements of claims on behalf of the owners of the vessels seized in 1887 were also forwarded.

## 1888.

### PROPOSAL FOR CLOSE SEASON.

The United States Government, in February, 1888, formally proposed to that of Her Majesty the establishment of an international close season for seals, comprising the period between the 15th April and 1st November.

When this proposal was referred to the Canadian Government it was pointed out that so far as the Canadian sealing industry was concerned the proposed close season might just as well read from 1st January to 31st December. Were any such dates entertained it would simply involve an entire abandonment of the industry.

It is a well known fact that the seals do not begin to enter the Behring Sea until the middle or end of May, while they leave those waters by the end of October. A close season beginning before the seals had arrived and ending after they had departed—had it been intended to have been operative on the Seal Islands, as well—would of course have entirely prohibited the taking of fur-seals. But there was no such intention. This close season was designed to apply only to the form of sealing known as pelagic sealing which is the sole mode that can be adopted by Canadian sealers.

The methods of the lessees of the Seal Islands (the only places in Alaska where the seals haul out) however, were to proceed as formerly during four months of the proposed close season. It is needless to say that this arrangement could not commend itself to the Canadian mind.

Therefore the Canadian Government took care to place Her Majesty's Government in possession of all information obtainable on these points, at the same time showing the disadvantage under which Canada would labour from a close season of such a nature.

During the year 1888, no seizures of British vessels took place in Behring Sea pending certain negotiations at Washington.

## 1889.

In 1889, however, British ships in Behring Sea were again molested and no less than eight vessels were either seized or expelled from that sea.

They are as follows :—

- "Juanita," seized ;
- "Pathfinder," seized ;
- "Triumph," ordered out ;
- "Black Diamond," seized ;
- "Lily," seized ;
- "Ariel," ordered out ;
- "Kate," ordered out ;
- "Minnie," seized.



As in the previous seizures, in each of these instances formal claims were preferred against the Government of the United States for compensation for loss and damages.

1890.

In 1890, the schooner “Pathfinder” was seized by the United States revenue cutter “Thos. Corwin” at Neah Bay, Washington Territory, she having been recognized as a seized British vessel which had escaped in 1889.

She was released after two days’ detention.

POSITION OF VESSELS WHEN SEIZED.

The following table shows the position of each vessel at the time of seizure and the name of the seizing vessel:—

Vessel.	Where seized.		By United States Steamship.
	North Latitude.	West Longitude.	
Carolena.....	55 50	168 53	Corwin.
Onward.....	54 32	167 55	do
Thornton.....	55 45	168 44	do
Favourite.....	Hailed and warned in about the same position as “Onward”.....		do
W. P. Sayward.....	54 43	167 51	Rush.
Grace.....	55 3	168 40	do
Anna Beck.....	54 58	167 26	do
Dolphin.....	54 38	167 3	do
Ada.....	15 miles north of Ounalaska.....		Bear.
Alfred Adams.....	54 48	167 49	Rush.
Triumph.....	About 10 miles south of Ouminak Pass.		do
Juanita.....	55 42	170 40	do
(Captain Shepard’s certificate.)			
Pathfinder.....	57 24	171 55	do
Triumph.....	50 5	171 23	do
Black Diamond.....	56 22	170 25	do
Lily.....	55 29	166 15	do
Ariel.....	Behring Sea.....		do
Minnie.....	do.....		do
Kate.....	do.....		do
Pathfinder.....	Neah Bay, Washington Ter.....		Corwin.

DISPOSITION OF SEIZED VESSELS.

The foregoing shows that during the period extending from 1886 to 1890, nineteen Canadian sealing vessels were seized in or ordered out of Behring Sea by the authorities of the United States of America.

Those seized in 1886, after being condemned, were laid up on the beach at Ounalaska, and after everything saleable had been disposed of, they were offered to their owners. Their deterioration from exposure to the action of time and weather rendered them practically worthless, and the distance at which they lay from their owners precluded their being removed except at a loss.

They are still lying on the beach at Ounalaska, and were recently valued by a United States Assistant Treasury Agent, as follows: “Thornton,” \$200; “Carolena,” \$25; “Onward,” \$200.

Of the vessels seized in 1887, the “Alfred Adams” escaped detention by sailing to Victoria; the “W. V. Sayward” was released under bonds, and an appeal entered in the Supreme Court of the United States; the others were sold.

All the vessels seized in 1889, instead of sailing to the United States ports as ordered by the seizing officer, proceeded to Victoria thus escaping detention.

The "Pathfinder" seized in Neah Bay, Washington Territory, after a short detention was released.

#### PROPOSED CONVENTION.

The conference at Washington in the spring of 1890 resulted in a proposed convention on the part of Great Britain.

This proposal provided for a mixed commission of experts to enquire fully into the subject and report within two years upon necessary regulations for the sealing industry on land and at sea.

Any international regulations which might be found necessary were to be embodied in a further convention and the accession of other powers thereto was to be invited. In the event of failure to agree upon regulations the question of differences to be referred to the arbitration of an impartial government.

Pending the report and for a period of six months after its date, a temporary measure without prejudice to ultimate decision was to be adopted as follows :

A "seal fishery line" to be drawn as set out in the convention ; taking seals on land or at sea to be prohibited north of the line from 1st May to 30th June, and from 1st October to 30th December during the intervening period, in order to prevent marauding on the breeding islands, vessels engaged in the fur seal fishery were to be prohibited from approaching the islands within a radius of ten miles.

Further temporary regulations which might be deemed necessary were also provided for.

This arrangement provided, it was thought, ample protection for the sealing industry, in that it covered the migrations of the seals to and from the breeding islands. The Government of the United States, however, rejected the proposal, and orders were issued to cruisers to seize the log books and seal-skins of vessels found sealing in the Behring Sea.

Against this action on the part of the United States Government Her Majesty's Government formally protested.

#### THE "MODUS VIVENDI."

The question is thus brought down to June, 1890, when the diplomatic correspondence dealing with the question of right arising out of the acquisition of Alaska from Russia by the United States, was resumed, which finally resulted in the agreement for a *modus vivendi* between Her Majesty's Government and that of the United States of America. This agreement was signed at Washington on the 15th day of June, 1891.

It was published in the *Canada Gazette* of 20th June, 1891, and reads as follows :—

"Agreement between the Government of Her Britannic Majesty and the Government of the United States for a *modus vivendi* in relation to the fur seal fisheries in Behring Sea.

"For the purpose of avoiding irritating differences and with a view to promote the friendly settlement of the questions pending between the two Governments touching their respective rights in Behring Sea, and for the preservation of the seal species, the following agreement is made without prejudice to the rights or claims of either party :—

"(1.) Her Majesty's Government will prohibit, until May next, seal killing in that part of Behring Sea lying eastward of the line of demarcation described in article No. 1 of the treaty of 1867, between the United States and Russia, and will promptly use its best efforts to ensure the observance of this prohibition by British subjects and vessels.

"(2.) The United States Government will prohibit seal killing for the same period in the same part of Behring Sea and on the shores and islands thereof, the property of the United States (in excess of 7,500 to be taken on the islands for the subsistence and care of the natives), and will promptly use its best efforts to ensure the observance of this prohibition by United States citizens and vessels.

"(3.) Every vessel or person offending against this prohibition in the said waters of Behring Sea, outside of the ordinary territorial limits of the United States, may be seized and detained by the naval or other duly commissioned officers of either of the high contracting parties, but they shall be handed over as soon as practicable to the authorities of the nation to which they respectively belong, who shall alone have jurisdiction to try the offence and impose the penalties for the same. The witnesses and proofs necessary to establish the offence shall also be sent with them.

"(4.) In order to facilitate such proper enquiries as Her Majesty's Government may desire to make, with a view to the presentation of the case of that Government before arbitrators, and in expectation that an agreement for arbitration may be arrived at, it is agreed that suitable persons designated by Great Britain will be permitted at any time, upon application, to visit or remain upon the seal islands during the present sealing season for that purpose.

"Signed and sealed in duplicate at Washington, this fifteenth day of June, 1891, on behalf of their respective Governments, by Sir Julian Pauncefote, G.C.M.G., K.C.B., H. B. M. Envoy Extraordinary and Minister Plenipotentiary, and William F. Wharton, Acting Secretary of State of the United States.

(Signed) "JULIAN PAUNCEFOTE. [Seal.]"

(Signed) "WILLIAM F. WHARTON. [Seal.]"

The Imperial legislation and Order in Council arising out of the *modus vivendi* agreement, is given below as published in *The Canada Gazette* of 25th July, 1891.

*Supplement to "The London Gazette" of Tuesday, the 23rd of June.*

WEDNESDAY, 24th June, 1891.

AT THE COURT AT WINDSOR, THE 23RD DAY OF JUNE, 1891.

*Present :*

The QUEEN'S Most Excellent Majesty.

Lord President.

Earl of Limerick.

Marquess of Salisbury.

Lord Arthur Hill.

Whereas by "The Seal Fishery (Behring's Sea) Act, 1891," it is enacted that Her Majesty the Queen may by Order in Council prohibit the catching of seals by British ships in Behring Sea or such part thereof as is defined by the said Order during the period limited by the Order :

And whereas the expression "Behring Sea" in the said Act means the seas known as Behring Sea within the limits described in an Order under the said Act :—

Now therefore Her Majesty in virtue of the powers vested in her by the said recited Act, by and with the advice of Her Privy Council, is hereby pleased to order and it is hereby ordered as follows :—

1. This Order may be cited as the Seal Fishery (Behring's Sea) Order in Council, 1891.

2. From and after the twenty-fourth day of June, one thousand eight hundred and ninety-one, until the first day of May, one thousand eight hundred and ninety-two, the catching of seals by British ships in Behring Sea, as hereinafter defined, is hereby prohibited.

3. For the purpose of the said recited Act and of this Order the expression "Behring Sea" means so much of that part of the Pacific Ocean known as Behring Sea as lies between the parallel of 65° 30' north latitude and the chain of the Aleutian Islands and eastward of the following line of demarcation, that is to say, a line commencing



ing at a point in Behring Straits on the said parallel of  $65^{\circ} 30'$  north latitude, at its intersection by the meridian which passes midway between the Islands of Krusenstern or Ignalook and the Island of Ratmanoff or Noonarbook and proceeding thence in a course nearly south-west through Behring Straits and the seas known as Behring Sea so as to pass midway between the north-west point of the Island of Saint Lawrence and the south-east point of Cape Choukotski to the meridian of  $172^{\circ}$  west longitude, thence, from the intersection of that meridian in a south-westerly direction so as to pass midway between the Island of Attou and the Copper Island of the Kormandorski couplet or group in the North Pacific Ocean, to the meridian of  $193^{\circ}$  west longitude.

#### CHAPTER 19.

An Act to enable Her Majesty, by Order in Council, to make Special Provision for prohibiting the Catching of Seals in Behring Sea by Her Majesty's Subjects during the Period named in the Order.

[11th June, 1891.]

Be it enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows :

1.—(1.) Her Majesty the Queen may, by Order in Council, prohibit the catching of seals by British ships in Behring Sea, or such part thereof as is defined by the said Order, during the period limited by the Order.

(2.) While an Order in Council under this Act is in force—

(a.) A person belonging to a British ship shall not kill, or take, or hunt, or attempt to kill or take, any seal within Behring Sea during the period limited by the Order ; and

(b.) A British ship shall not, nor shall any of the equipment or crew thereof, be used or employed in such killing, taking, hunting, or attempt.

(3.) If there is any contravention of this Act, any person committing, procuring, aiding, or abetting such contravention shall be guilty of a misdemeanour within the meaning of the Merchant Shipping Act, 1854, and the ship and her equipment, and everything on board thereof shall be forfeited to Her Majesty as if an offence had been committed under section one hundred and three of the said Act, and the provisions of sections one hundred and three and one hundred and four, and part ten of the said Act (which are set out in the schedule to this Act) shall apply as if they were herein re-enacted, and in terms made applicable to an offence and forfeiture under this Act.

(4.) Any commissioned officer on full pay in the naval service of Her Majesty shall have power, during the period limited by the Order, to stop and examine any British ship in Behring Sea, and to detain her, or any portion of her equipment, or any of her crew, if in his judgment the ship is being or is preparing to be used or employed in contravention of this section.

(5.) If a British ship is found within Behring Sea having on board thereof fishing or shooting implements or seal-skins or bodies of seals, it shall lie on the owner or master of such ship to prove that the ship was not used or employed in contravention of this Act.

2. (1.) Her Majesty the Queen in Council may make, revoke and alter Orders for the purposes of this Act, and every such Order shall be forthwith laid before both Houses of Parliament and published in the *London Gazette*.

(2.) Any such Order may contain any limitations, conditions, qualifications and exceptions which appear to Her Majesty in Council expedient for carrying into effect the object of this Act.

3.—(1.) This Act shall apply to the animal known as the fur seal, and to any marine animal specified in that behalf by an Order in Council under this Act, and the expression "seal" in this Act shall be construed accordingly.

(2.) The expression "Behring Sea" in this Act means the seas known as Behring Sea within the limits described in an Order under this Act.

(3.) The expression "equipment" in this Act includes any boat, tackle, fishing or shooting instruments, and other things belonging to the ship.

(4.) This Act may be cited as the Seal Fishery (Behring's Sea) Act, 1891.

The schedule of enactments of the Merchants Shipping Act, 17 and 18 Vict., chap. 104, referred to in the above Act, being somewhat lengthy and unnecessary for the present purpose, are not printed here.

DEPARTURE OF THE SEALING FLEET.

Prior to the signature of the *modus vivendi* which was effected only on the 15th June, 1891, the sealing fleet had cleared for the North Pacific Ocean and Behring Sea as usual, no molestations having taken place the previous year.

The fleet from Victoria was composed as follows, and had cleared from that port previous to 15th May, 1891.

CANADIAN Sealing Vessels cleared from Victoria, B. C., 1891.

Name.		Value, with Outfit.	Tons.	Indian Crew.	White Crew.
		\$			
Schooner	Venture.....	5,000	48	18	4
do	Mascot.....	6,000	40	18	5
do	Maggie Mac. ....	10,000	70		23
do	Lily.....	8,500	69	20	5
do	Triumph.....	14,000	98		23
do	Sea Lion.....	7,000	50		19
do	Beatrice.....	7,000	66	20	5
do	Aurora.....	8,000	41	20	4
do	Penelope.....	10,000	70		20
do	Carmolite.....	13,000	99		23
do	Ocean Belle.....	10,000	83		23
do	Katherine.....	5,500	82	20	5
do	Annie C. Moore.....	15,000	113		23
do	Mountain Chief.....	1,000	23	12	2
do	W. P. Sayward.....	8,000	60	22	5
do	Sapphire.....	14,000	124	28	6
do	Minnie.....	8,000	46	20	5
do	E. B. Marvin.....	12,000	117		24
do	Teresa.....	10,000	63		25
do	Martha.....	1,000	12		5
do	Ariel.....	9,000	90	24	8
do	Pioneer.....	10,000	66		23
do	Mary Ellen.....	7,250	63	24	8
do	Mary Taylor.....	8,000	43		18
do	Viva.....	12,000	93		23
do	Rosie Olsen.....	7,500	39	20	6
do	Wanderer.....	5,000	25	12	4
do	Kate.....	4,000	58	24	5
Steamer	Thistle.....	22,000	147		27
Schooner	Favourite.....	8,000	80	24	6
do	Walter L. Rich.....	7,000	76		22
do	C. H. Tupper.....	13,000	99		24
do	Oscar and Hattie.....	12,000	81	26	6
do	Carlotta G. Cox.....	13,000	76		20
do	Geneva.....	13,000	92		23
do	Letitia.....	1,000	28	11	
do	Umbrina.....	14,000	98		23
do	Sierra.....	1,200	25	12	2
do	May Belle.....	10,000	58		21
do	Winifred.....	1,200	13		8
do	Sylvia Handy.....	10,000	68		22
do	Labrador.....	7,000	25		10
do	City of San Diego.....	7,500	46		17
do	Maud S.....	12,000	97		24
do	Laura.....	5,500	19	12	4
do	Henrietta.....	5,000	31	12	4
do	Borealis.....	8,000	37	18	5
do	Anioko.....	8,000	75	22	6
do	Annie E. Paint.....	11,000	82		20
Vessels for 1891.....		425,150	3,203	439	643
do 1890.....		248,250	2,042	342	354
Vessels, increase, 1891.....		176,900	1,161	115	289

In addition to these several schooners were fitted out in Vancouver and cleared from that port for the sealing grounds. This was a new venture.

#### PROTESTS AGAINST THE "MODUS VIVENDI."

From all parties interested in the sealing industry throughout the province of British Columbia, came strong protests against the closure of Behring Sea, considering especially that the sealing fleet had long before cleared for the purpose of participating in an industry which hitherto had been a legitimate and remunerative one without any previous notification of the intention of Her Majesty's Government to prohibit it by legislation.

The Sealing Association of the city of Vancouver represented that while the *modus vivendi* must have borne heavily upon the owners of sealings throughout the province, the fact of the venture being a new one in Vancouver, and the vessels having been built and equipped within the year for the sole purpose of proceeding to Behring Sea, renders it particularly severe upon them.

The masters of the sealing fleet became aware of the *modus vivendi* only when spoken by British and United States cruisers in Behring Sea or in the vicinity of the entrances thereto, months after their departure on their voyages.

#### ASSURANCE OF RECOMPENSE.

Her Majesty's Government had already authorized answers to protests to the effect that while they were of opinion that the total cessation of sealing in the Behring Sea, would greatly enhance the value of the produce of the coast fishery, and therefore did not anticipate that British sealers would suffer to any great extent by exclusion from Behring Sea; they would however be prepared to consider any case in which it was clearly established that direct loss had been suffered by a British subject, through the enforcement of the prohibition against sealing in Behring Sea.

Accordingly all representations from those interested in the sealing industry, were answered in that direction.

#### CLAIMS TO RECOMPENSE FOR EXPULSION UNDER "MODUS VIVENDI."

Formal protests and claims to recompense for expulsion from Behring Sea under the terms of the *modus vivendi* agreement and the consequent breaking up of their sealing voyages, were received and forwarded on behalf of the owners of the following vessels :—

"E. B. Marvin,"	expelled	6th July, by U.S. steamer "Rush."
"Thistle"	do	12th July, by U.S. steamer "Corwin."
"Anioko"	do	30th June, by U.S. steamer "Thetis."
"Winnifred"	do	15th July, 1891, by U.S. vessel "Thetis."
"Annie E. Paint"	do	29th June, 1891, by U.S. vessel "Thetis."
"Maggie Mac"	do	1st July, 1891, by U.S. vessel "Thetis."
"Minnie"	do	15th July, 1891, by U.S. vessel "Thetis."
"Walter L. Rich"	do	29th June, 1891, by U.S. vessel "Thetis."
"Sea Lion"	do	3rd July, 1891, by H.M. warship "Nymph."
"Geneva"	do	16th July, 1891, by H.M. ship "Pheasant."
"Eliza Edwards"	do	7th July, 1891, by U.S. ship "Thetis."
"C. D. Rand"	do	12th July, 1891, by U.S. steamer "Rush."
"Vancouver Belle"	do	5th July, 1891, by U.S. steamer "Corwin."



"Hesperus," returned from Shennaqui Islands thus abandoning voyage on being told for the first time, 25th July, 1891, that vessels were being expelled from Behring Sea.

"C. H. Tupper,"	expelled	1st July, 1891, by U.S. vessel "Thetis."
"Rosie Ohlsen "	do	24th July, 1891, by U.S. vessel "Alert."
"Viva "	do	30th July, 1891, by U.S. vessel "Thetis."
"May Belle "	do	22nd July, 1891, by U.S. vessel "Mohican."
"Wanderer "	do	15th August, 1891, by U.S. vessel "Marion."
"Venture "	do	7th August, 1891, by U.S. vessel "Thetis."
"Triumph "	do	17th July, 1891, H.M. ship "Pheasant."
"Sapphire "	do	9th August, 1891, H.M. ship "Porpoise."
"Carlotta G. Cox "	do	8th August, 1891, U.S. vessel "Thetis."
"Teresa "	do	17th July, 1891, U.S. vessel "Mohican."
"Aurora "	do	7th July, 1891, by U.S. vessel "Richd. Rush."
"Oscar & Hattie "	do	by U.S. vessel "Mohican."

"W. P. Sayward," abandoned voyage on being told of expulsions.

"Katherine,"	expelled	18th July, 1891, by H. M. ship "Pheasant."
"Mary Taylor "	do	4th August, 1891, by U.S. vessel "Corwin."
"Beatrice " (1)	do	23rd July, 1891, by U.S. vessel "Mohican."
"Maud S. "	do	23rd July, 1891, by U.S. vessel "Mohican."
"Laura "	do	17th July, 1891, by U.S. vessel "Mohican."
"Labrador "	do	by H.M. ship "Pheasant."
"Umbrina "	do	23rd July, 1891, by U.S. vessel "Mohican."
"Beatrice " (2)	do	8th August, 1891, U. S. steamship "Alert."
"Ocean Belle "	do	30th June, 1891, U. S. steamship "Thetis."
"Carmolite "	do	7th August, 1881, H. M. S. steamship "Nympe,"
"Annie C. Moore "	do	6th August, 1891, H. M. S. steamship "Nympe."
"Penelope "	do	7th July, 1891, U. S. steamship "Rush."
"Mary Ellen "	do	2nd July, 1891, U. S. steamship "Thetis."
"Walter A. Earle "	do	7th August, 1891, H. M. S. steamship "Pheasant."

#### THE ENQUIRY INTO SEAL LIFE.

Section 4 of the *modus vivendi* above quoted provides for enquiries into seal life on the part of the British Government, with a view to the presentation of the British case before arbitrators, and in expectation of an agreement for arbitration, suitable persons designated by Great Britain were to be permitted to visit or remain on the seal islands during the season of 1891 for that purpose.

Accordingly in June last, Her Majesty's Government appointed two British Commissioners, Sir George Baden-Powell, K.C.M.G., F.R.G.S., M.P., &c., and George Mercer Dawson, D.Sc., F.G.S., F.R.S., F.R.M.S., Assistant Director of the Geological Survey of Canada, the latter being the Canadian nominee.

The Commissioners sailed from Victoria in the steamship "Danube," chartered by Her Majesty's Government, for their conveyance to their field of labour, and returned to Victoria on the 8th October, 1891.

## THE "W. P. SAYWARD" CASE.

As previously stated, this vessel, which was seized in 1887 by the United States revenue cutter "Richard Rush," was released upon giving a bond as security, and an appeal was entered in the Supreme Court of the United States.

The Canadian Government having, at the suggestion of the Imperial Government, undertaken on behalf of the owners the further prosecution of the case, decided to abandon the appeal, and with the concurrence of the Imperial Government, moved the Supreme Court of the United States for a writ of prohibition, directed to the Alaska Court, forbidding it further to proceed in the matter, upon the ground that the offence, if any, was committed beyond the territorial jurisdiction of the municipal courts of the United States.

The question was brought up before the Supreme Court of the United States, during the October term, for final hearing of the application for the writ of prohibition to the District Court of Alaska.

The case was fully argued by Messrs. Calderon Carlisle and Joseph H. Choate, on behalf of the petitioners, and Mr. Solicitor General Taft and Mr. Attorney General Miller on behalf of the United States, and a decision was subsequently given refusing the application.

## THE NEWFOUNDLAND BAIT ACT.

## RETROSPECTIVE.

In referring to this subject, it might be well to take a retrospective view of the cause which led to the action of Newfoundland in assuming an unfriendly attitude towards Canada.

## THE DECLARATION OF 1783.

The declaration of His Britannic Majesty, of 1783, contained the following:  
 " \* \* \* To this end and in order that the fishermen of the two nations may  
 " not give cause for daily quarrels, His Britannic Majesty will take the most positive  
 " measures for preventing his subjects from interrupting in any manner, by their com-  
 " petition, the fishery of the French during the temporary exercise of it, which is grant-  
 " ed to them upon the coast of the Island of Newfoundland; and he will for this  
 " purpose cause the fixed settlements, which shall be formed there, to be removed. His  
 " Britannic Majesty will give orders that the French fishermen be not incommoded in  
 " cutting the wood necessary for the repair of their scaffolds, huts and fishing vessels.  
 " \* \* \* \* \*

## ARRANGEMENTS OF 1884-1885.

Disputes with the French having arisen, to effect a settlement, Her Majesty's Government appointed Mr. Clare Ford, C.B., and Mr. E. B. Pennell as British Commissioners to Paris in 1884.

In April of that year a provisional arrangement was signed by the commissioners which it was hoped would be accepted by the colony of Newfoundland, as a satisfactory solution of the question.

This proposal was subsequently replaced by another signed 14th November, 1885.

When the "arrangement" was submitted to the existing executive of the Newfoundland Government, a general approval thereof was met with, but certain modifications were stipulated, which, if obtained, would, it was implied, secure Newfoundland's support of the arrangement.

These modifications were substantially conceded, and the support of the then Government of Newfoundland was expected.

#### REJECTION OF ARRANGEMENT.

A change in Government had taken place however, and the successors explained that the principal objection was to be found in Article XVII, in the following words :—

“French fishermen shall have the right to purchase bait, both herring and capelin on shore or at sea, on the shores of Newfoundland, free from all duty or restrictions, “subsequent to the 5th April in each year and up to the close of the fishing season.”

It was held that the bounties granted to their fishermen by the French Government, together with the unfair advantage possessed by them in the markets of France and Spain, threatened disaster to the most important industry of Newfoundland, which was already depressed.

An opinion prevailed among Newfoundlanders that withholding the bait supply from the French would counteract the advantage possessed by them and they were loth to surrender what they regarded as the key to the position. Hence the objection to any agreement containing such a bait clause.

As to the favourable attitude of the former Government it was stated that the market price of fish was much at the time and the bounties but comparatively little felt, but at the then present time the advantage in competition could not be sustained.

#### ACTION BY FRANCE.

Orders were then issued by the French Government for a vigorous enforcement of their treaty rights.

#### PROVISIONAL OFFER BY NEWFOUNDLAND.

The Government of Newfoundland then offered to accept the “agreement” if the French Government would give assurances :

1st. That they would not renew the export bounties after the expiration of the existing law on the subject ;

2nd. That they would consent to an authoritative definition which would be satisfactory to the two Governments of the words “interrupt in any manner” contained in the declaration of 1783, and Article VIII of the “arrangement” ; and

3rd. That they would permit British fishermen; when brought before the commanders of French ships of war, to have their statements taken down in writing in their own language and attached to the proceedings.

#### OFFER REFUSED BY FRANCE.

France, however, intimated that no alteration would be made in her policy affecting the system of fishing bounties.

#### THE BAIT ACT OF 1886.

Following this intimation comes the Bait Act of 1886, of which the following is a synopsis :—

“An Act to regulate the exportation and sale of Herring, Capelin, Squid and other bait fishes.”

Section 1. No person shall take bait fishes for exportation without obtaining a special license from the Receiver General.

Section 2. License to be issued by authority of Governor in Council and countersigned by Colonial Secretary.



Section 3. Penalty for forging or counterfeiting the signature of the Receiver General to license provided in 4th section.

Section 4. Penalty for the violation of the provisions of this Act for the first offence \$400, and for subsequent offences to imprisonment for 12 months.

Section 5. Offences against this Act may be prosecuted in a summary manner before a stipendary magistrate.

Section 6. Persons convicted may appeal to the Supreme Court.

Section 7. Treaty rights of nations in amity with Her Majesty not affected by this Act.

Section 8. Operation of this Act postponed until 31st December, 1886.

It will be seen the object of this Act was to prevent the taking of bait for export or sale without a license.

#### ACT RESERVED.

The Governor of Newfoundland reserved the Act for royal assent.

#### ROYAL ASSENT ASKED.

Then followed difficulties arising out of the new instructions to French cruisers and the representations of the Newfoundland Government designed to secure Her Majesty's sanction to the Bait Act.

#### REVIEW.

This Act was a new departure. The records show that when the Convention of 1857 was under consideration, a bait clause formed one of the grounds for rejection by Newfoundland; but that clause which allowed the French to catch bait under certain circumstances, in addition to purchasing it, was much less favourable than that of the "arrangement" of 1885.

In negotiations since 1857, provisions for the sale of bait to the French have been invariably contemplated, and on more than one occasion had been agreed to by representatives of Newfoundland; while in resolutions of 1867 and 1874, the Executive of that colony agreed to a clause allowing the French fishermen to purchase bait at such times as British subjects might lawfully take the same.

In the first stage of the "arrangement" of 1884, the bait clause was not objected to, but only in the revised "arrangement" of 1885 was the exception made.

#### ROYAL ASSENT WITHHELD.

Her Majesty's Government, in view of the departure from a policy so long obtaining, and being of opinion that a remedy might be found in some other direction, could not advise Her Majesty to allow the Act for the season of 1887.

#### THE BAIT ACT OF 1887.

On the 21st February, 1887, the Newfoundland Government passed another Bait Act, of which the following is a synopsis:—

"An Act to regulate the exportation and sale of Herring, Capelin, Squid and other bait fishes."

Sec. 1. No person shall haul, catch, purchase, or sell bait, except he shall obtain a license from the Receiver-General.

Sec. 2. Persons found hauling, taking, or conveying bait fishes may be examined on oath by a justice of the peace or other officer.

Sec. 3. License issued under the authority of the Governor in Council.

Sec. 4. Persons forging or counterfeiting signature of the Receiver-General guilty of offence against this Act.

Sec. 5. Penalty for first and subsequent violations.

Sec. 6. Mode of procedure.

Sec. 7. Persons convicted may appeal to Supreme Court.

Sec. 8. Proceedings not quashed for informality.

Sec. 9. Additional penalty.

Sec. 10. What included under "vessel."

Sec. 11. Rights of States in amity with Her Majesty not affected.

Sec. 12. Suspending clause.

This Act was not to come into operation until it had received Royal Assent.

#### REMONSTRANCE BY CANADA.

The Canadian Government reviewed this Act and pointed out to Her Majesty's Government that if it became law,—

(1). Canadian fishermen on the Grand Banks would be cut off from their free supply of bait, either by purchase or catch ;

(2). Canadian fishermen on the coast of Labrador would be debarred from the privilege of free catch of herrings and their hitherto untrammelled trading in herrings ;

(3). Whatever trade was done by Canadians in herring or bait fishes upon the Newfoundland coasts, would be no longer left free.

The exclusion of British subjects from their rights to fish in British waters was vigorously protested against.

#### ASSURANCES BY NEWFOUNDLAND.

Sir Robert Thorburn and Sir Ambrose Shea, on behalf of the Government of Newfoundland, gave solemn assurances that under the provisions of this Act Canadian fishermen were to be on the same footing as those of Newfoundland.

The following is the former's telegram to the Attorney General of Newfoundland :—

"Canadian Government evidently misunderstand scope and intention of our Bait Act. Assure them promptly, by telegraph, that their fishermen will enjoy equal "privileges with our own, and that practically there will be no restrictions on bait "supply of any British subjects."

This was followed by a joint telegram to the High Commissioner for Canada from Sir Robert Thorburn and Sir Ambrose Shea, as below :—

"Your fishermen are on same footing as ours under Bait Bill, and no practical impediment in way of either. Our Government will give any required guarantee that this is our reading of the Act. Advise Colonial Office as soon as possible that this explanation is satisfactory."

Similar assurances to these were given to Her Majesty's Government by the Newfoundland delegates, among which the following paragraph occurred :—

"The working clauses of the Act are such as local knowledge only could have wisely devised for its effective execution, *and I may observe that they were adopted mainly* by regard to their application to the limited number of *our own people*, by whom it was thought the chief efforts might be made to infringe on its provisions."

Acceptance of these assurances which were most full and spontaneous, was asked by the Newfoundland authorities in order to "remove objections" and "promote Royal Assent."

## ALLOWANCE OF ACT.

This was considered by Her Majesty's Government as affording sufficient safe guard to Canadian interests, and in a communication from the Colonial Office to the Foreign Office, it was stated :—"Sir H. Holland is of opinion that the explanation given by Sir A. Shea, if expressed in a declaration such as is suggested by Sir A. Campbell, will render unnecessary any amendment of the Bill, and he would now propose, with Lord Salisbury's concurrence, to inform the Newfoundland delegate that it will receive Her Majesty's sanction."

Accordingly the Bill was allowed.

The Canadian Government then asked for an indication of the nature of the regulation under which it was proposed Canadians should enjoy equal rights with Newfoundlanders.

No intimation of this nature, however, was vouchsafed.

## THE BAIT ACT of 1889.

In 1889 the Newfoundland Government passed an amendatory Bait Act, and as it is the one in existence and under which all the difficulties between the two colonies, affecting the bait question, have arisen, it is given in full below :—

Cap. VI.—*An Act to amend and consolidate the Laws relating to the Exportation and Sale of Bait Fishes.*

[Passed 1st June, 1889.]

Be it enacted by the Governor, Legislative Council, and Assembly, in Legislative Session convened, as follows :—

1. No person shall—

- (1.) Export, or cause or procure to be exported, or assist in the exportation of ; or
- (2.) Haul, catch, take, or have in his possession, for the purpose of exportation ; or
- (3.) Purchase or receive in trade or barter, for the purpose of exportation ; or
- (4.) Take, ship, or put, or haul on board, or assist in taking, shipping, putting, or hauling on board of any ship or vessel, for any purpose whatever ; or
- (5.) Carry or convey on board of any ship or vessel, for any purpose whatever, any herring, capelin, squid, or other bait fishes, from, on, or near any parts of this Colony or its dependencies, or from or in any of the bays, harbours, or other places therein, without a license in writing, to be granted and issued as hereinafter provided.

2. Licenses may be granted for any of the following purposes viz. :

- (a.) To export bait fishes to a foreign country for bait purposes ;
- (b.) To export bait fishes to a foreign country for food or consumption ;
- (c.) To export bait fishes for use for bait purposes in prosecuting deep-sea fisheries ;
- (d.) To haul, catch, or take bait fishes for exportation ;
- (e.) To purchase bait fishes for exportation for food or consumption ;
- (f.) To take, ship, or put on board a ship or vessel, or to carry or convey on board a ship or vessel, bait fishes for exportation for food or consumption ;
- (g.) To purchase bait fishes for exportation for bait purposes ;
- (h.) To take, ship, or put on board a ship or vessel, or to carry or convey on board a ship or vessel, bait fishes for exportation for bait purposes ;
- (i.) To take, ship, or put on board a ship or vessel, or to carry or convey on board a ship or vessel, coastwise, to be discharged or landed or transhipped to some other ship or vessel within some port in this colony.

3. No such licenses shall be issued except under the authority of the Governor in Council, and countersigned by the Colonial Secretary.

4. The Governor in Council may, from time to time, by proclamation, suspend or limit the operation of this Act, and the issue of licenses thereunder, in relation to any



district or part of this colony, or the coasts thereof, and for such period in relation to sale or exportation to such places, or for such purposes and in such quantities as shall appear expedient, and as shall be declared and defined in the proclamation.

5. No license under this Act shall be granted to any person unless he shall have first made an affidavit before a sub-collector or preventive officer of customs, or a stipendiary magistrate, setting forth the following particulars, viz., the name of the person to whom the license is to be granted ; the name of the vessel on board of which it is intended to convey or export bait fishes ; the purpose for which such bait fishes are intended to be conveyed or exported, whether for food or consumption, or for bait purposes ; the country to which it is intended to export the same, or the place where the fishery is to be prosecuted, for which such bait fishes are to be used.

6. Applications for licenses under this Act shall be made to a stipendiary magistrate or a customs officer, who shall require the applicant in each case to make, before him, an affidavit stating the facts and particulars, as required under section 5 to be set forth in the license ; and it shall be the duty of the said stipendiary magistrate or customs officer to report to the Governor in Council any refusal on the part of the applicant to make such affidavit, or any *bona fide* doubt on the part of such stipendiary magistrate or customs officer of the truth of any of the statements set forth in such affidavit, or of a belief on his part that such license is applied for the purpose of evading or defeating, or assisting in evading or defeating, the provisions of this Act. In such case it shall be the duty of such stipendiary magistrate or other officer to withhold such license and await further instructions.

7. In every case in which a license is granted under this Act, the person to whom the same is granted shall also give bond to the Receiver-General of this colony, with two sufficient securities in the sum of not less than 1,000 dollars, or more than 2,000 dollars each, containing the condition that the terms of the license shall, in all respects, be complied with ; and in the case of a license to export to a foreign country, that satisfactory proof of the landing of the cargo in such foreign country will be furnished within a stated period, and the forfeiture of the penal sum under such bond shall be in addition to any other penalty, forfeiture, or punishment which may be imposed for the same offence under this Act.

8. The forms of the license, affidavits, and bonds, above provided, shall be prescribed by the Governor in Council.

9. Any person who shall violate any of the provisions of section 1 of this Act, or any of the sub-sections thereof ; or

(1.) Use, dispose of, or deal with, any bait fishes, otherwise than in accordance with the terms of the affidavit made upon application for a license, or with the terms of such license ; or

(2.) Make any untrue statement in any affidavit upon application for a license under this Act ; or

(3.) Obtain a license under this Act by means of any false statement or misrepresentation, or by the suppression or concealment of any material fact, shall be liable, for every first offence, to a penalty not exceeding 1,000 dollars, or imprisonment for a period not exceeding twelve months.

(4.) Any person convicted of a second or subsequent offence under this Act shall, on conviction, be subject to imprisonment, with hard labour, for a period of not less than twelve months.

10. In addition to the punishment prescribed by the foregoing section, the convicting Magistrate may order the confiscation and sale of the herring, capelin, squid, or other bait fishes which have been sold, purchased, hauled, taken, conveyed, or exported in violation of the provisions of this Act, or the terms of any license thereunder, or of the boat or vessel on board of which such bait fishes shall be found to have been unlawfully shipped, conveyed, or exported, and the forfeiture of any license held by the offender.

11. Any person who shall sell any herring, capelin, squid, or other bait fishes, for the purpose of shipping or putting on board of any ship or vessel, or for the purpose of

exportation to any person not holding or producing a license under this Act, shall be liable to a fine not exceeding 500 dollars, or the imprisonment not exceeding three months.

12. In any prosecution under the next preceding section, the onus of proof that the bait fishes were not intended for shipment or for exportation shall rest upon the party accused : Provided there be proof of a sale under such circumstances as shall be consistent with a reasonable presumption that shipment or exportation was intended.

13. The Governor in Council, may from time to time, appoint special Commissioners for the purpose of enforcing the provisions of this Act.

14. Any such commissioner, or any justice of the peace, sub-collector, preventive officer, fishery warden, or constable may board and examine and search any boat or vessel suspected of having on board, or of conveying or exporting, bait fishes contrary to the provisions of this Act, or of any license granted thereunder ; and in case any such commissioner, justice of the peace, sub-collector, preventive officer, fishery warden, constable, or the crew of any vessel employed by the Government, shall make a signal by hoisting the international signal B. M. I., meaning "Heave to, I will send a boat," and firing a gun or by dipping at the main peak three times the flag, with the badge of the colony, as prescribed by the Colonial Regulations, it shall be the duty of the owner, master, or person managing or controlling such vessel to heave to until such commissioner, justice, sub-collector, fishery warden, or constable shall have boarded and examined such last-named vessel ; and in case of such owner, master, or person managing or controlling such last-named vessel, omitting to heave her to, or obstructing or omitting to afford facilities for such commissioner, justice, sub-collector, preventive officer, fishery warden, or constable in boarding and examining such vessel, he shall be subject to a penalty not exceeding 500 dollars, or to imprisonment for a term not exceeding three months. The master of any vessel who shall refuse or unreasonably delay in obeying such signal may be arrested and brought before a stipendiary magistrate, and his vessel may be seized and held by any such commissioner, justice, sub-collector, preventive officer, fishery warden, or constable until an adjudication shall have taken place upon a complaint under this section.

15. Any person found hauling, catching, taking, purchasing, selling, shipping, or conveying any bait fishes, or any person having any such fishes in his possession, or the master, owner, or crew of any boat or vessel on board of which any bait fishes may be found, may be examined on oath by a justice of the peace, sub-collector, or preventive officer, fishery warden, or commissioner, appointed under this Act, as to the quantity and kind of bait fishes in his possession, or on board of such boat or vessel the purpose for which such bait fishes are intended to be used, or as to the place to which the same are intended to be conveyed or exported, and upon his refusing to answer, or answering untruly, or failing to produce a license under this Act, or, having such license, being found to have violated or failed to comply with the provisions thereof, such justice, sub-collector, preventive officer, fishery warden, or commissioner may seize the boat or vessel on board of which such bait fishes shall have been hauled or caught, or put, kept, shipped, carried, conveyed, or exported, or on board of which the same may have been found, her tackle, apparel, furniture and outfit, and the said bait fishes so found as aforesaid, and may hold the same until an adjudication shall have been had upon a complaint in relation to such alleged offence.

16. In any such case as mentioned in the next preceding section, any officer therein authorized to seize any boat or vessel, and any constable or peace officer then present shall have power, by direction of any such officer authorized as aforesaid, and without any warrant or complaint upon oath, to arrest any person found committing or omitting to do any of the acts for or on account of which such boat or vessel may be seized, and to detain him in custody until an adjudication shall have taken place as before provided.

17. In any prosecution under this Act, the fact of shipping, putting, or having bait fishes on board of any boat or vessel shall be *prima facie* evidence of the same having been so shipped, put, had, or conveyed, for the purpose of exportation, and the refusal or failure to produce a license upon being called upon so to do shall be *prima*



*facie* evidence of such bait fishes having been shipped, put, conveyed, or exported without a license; and any exportation, or intended exportation, of bait fishes shall, in the absence of proof to the contrary, be held to be an exportation or intention to export for bait purposes.

18. All offenders against the provisions of this Act may be prosecuted and convicted, and all fines, forfeitures, penalties, orders for confiscation, and other punishments imposed, recovered, and made in a summary manner before a stipendiary magistrate. In the event of the prosecution of an offender who would not be liable to or ordered to pay a fine, then the reasonable expenses of the prosecutor, including a fair amount for his time and labour expended in and about such prosecution, shall, on the certificate of the magistrate who heard the case, be paid to the prosecutor by the Receiver-General.

19. If any person convicted under this Act shall feel himself aggrieved by such conviction, he may appeal therefrom to the then next sitting of Her Majesty's Supreme Court holden in or nearest to the place where such conviction shall have been had: Provided notice of such appeal, and of the cause and matter thereof, be given to the convicting magistrate, in writing, within seven days next after such conviction, and the party desiring to appeal shall also, within fourteen days after such notice, give and enter into recognizance, with two approved sureties, before the convicting magistrate, conditioned for the appearance of the person convicted at such next sitting of the Supreme Court on the first day of such sitting, for the prosecution of the appeal with effect and without delay to abide the judgment of the court thereon, and for the delivery and surrender of any vessel or other property ordered to be confiscated, and to pay such costs as the court shall award. Any person who shall be convicted and imprisoned by any such magistrate for an offence against this Act, and who shall have given such notice of appeal, and shall have entered into such recognizance with approved sureties, may be discharged from prison, in which case the recognizance shall be further conditioned for the surrender of the convicted party, on the first day of such next sitting of the Supreme Court, to the sheriff of the district in which such appeal may be heard.

20. No proceeding or conviction by, or order of any justice or other officer under this Act, shall be quashed or set aside for any informality, provided the same shall be substantially in accordance with the intent and meaning of this Act.

21. In this Act the word "vessel" shall include any boat or ship registered or not registered, jack, skiff, punt, or launch, whether propelled by sails, oars or steam.

22. Nothing in this Act shall affect the rights and privileges granted by treaty to the subjects of any State in amity with Her Majesty.

23. For the purposes of this Act, all stipendiary magistrates shall be deemed to be stipendiary magistrates for the colony, and may exercise the jurisdiction given by this Act in any part of the colony. All officers engaged in carrying out this Act, and the masters and crews of all vessels engaged in the said service, may severally be sworn as special constables, and shall, while engaged in carrying out this Act, have all the powers, authority, and protection of police constables.

24. The Act passed in the fiftieth year of the reign of Her present Majesty, Chapter 1, entitled, "An Act to regulate the exportation and sale of herring, capelin, squid, and other bait fishes," and the Act passed in the fifty-first year of the said reign, Chapter 9, entitled, "An Act to amend an Act passed in the fiftieth year of the reign of Her present Majesty, entitled, 'An Act to regulate the exportation and sale of herring, capelin, squid, and other bait fishes,'" are hereby repealed: Provided that this repeal shall not be held to affect any penalty, forfeiture, or liability incurred under the said Act, or any proceedings for enforcing the same, had, done, completed, or pending at the time of this appeal, or any office, appointment, or authority or duty created, conferred, or imposed, or any right or privilege acquired or existing, or any license granted under the authority of the said Acts; and provided further, that every person holding a license under either of the said Acts shall as soon as practicable after the passing of this Act, surrender the same to the nearest magistrate or customs officer authorized to



issue licenses under this Act, who shall thereupon grant in lieu thereof a license under the provisions of this Act for such purpose as the same shall be required; and any license issued under the authority of said Acts, not so surrendered as soon as practicable, or within a reasonable period, shall be held to have been terminated, and to be of no further effect.

25. This Act shall come into force at such date as shall be appointed by the Governor by his proclamation.

This Act includes the provisions of that of 1887. It prohibits the export, catch, purchase, or possession of any bait fishes for the purpose of exportation from Newfoundland.

Provision is made for the granting of licenses for the above purposes under the authority of the Governor in Council.

Extraordinary penalties and imprisonment are provided for fishing for or possessing herring, capelin, squid, or other bait fishes in the bays and harbours or other places in Newfoundland.

The fourth section admits of a suspension or limitation of the Act by the Governor in Council.

It provided for its coming into force by proclamation of the Governor.

During 1889, it was not enforced against British subjects.

#### ENFORCEMENT AGAINST CANADA.

In 1890, Canada was notified by the Newfoundland Government that the Act would be enforced against her fishermen.

This Act came into operation on the 8th day of April, 1890, by proclamation published in the *Royal Gazette* of Newfoundland.

On the 9th of the same month, the Colonial Secretary issued the following instructions relating to the enforcement of the Act:—

#### INSTRUCTIONS for Magistrates, Customs Officers, &c., in relation to enforcement of Bait Act, 1889.

Under proclamation of the Governor no exportation or sale or purchase, or taking of bait fishes of any sort is to be permitted without a license.

Licenses of three sorts will be granted: One, free of charge, to vessels belonging to Newfoundland and prosecuting the deep sea fishery; one to Newfoundland punt fishermen, free of charge, to catch bait for sale to foreign vessels or otherwise; and one for foreign vessels to purchase bait.

In all cases of applications for licenses (except Newfoundland punt fishermen who catch for sale to foreign vessels) the party applying must make an affidavit setting forth all the particulars required to be stated in the license. (See Bait Act, 1889.) This affidavit must be made either by the master of the vessel for which the license is applied for, or by the owner or agent of the owner, or on behalf of the master. Blank forms of these affidavits of each sort are furnished. The affidavits may be made before a magistrate or a customs officer.

You will notice that the licenses have been signed by the Colonial Secretary, and they must also be signed by the person issuing the license, either a customs officer or magistrate.

A license fee of one dollar per ton is to be paid by vessels of all nations (French, American and Canadian) entering the harbours of this colony in quest of bait fishes.

All such foreign vessels shall be restricted to one barrel of bait per ton, and shall be compelled to take out a new license and pay such license fee as aforesaid upon each entry into any port of this colony, besides the ordinary light dues.

A second license shall not be granted within three weeks from the date of the first license.

Upon granting a license to a foreign vessel, you shall notify the customs officers at all the other ports of entry named herein by telegram or letter that you granted such license stating date of issue, so as to prevent such vessel from obtaining a second license within the period stated above.

In the case of a foreign vessel taking bait at your port, you will employ officers to see that only the quantity named in license is taken aboard.

During the fishing season of 1890, Canadian fishing vessels on the coast of Newfoundland desiring bait for their operations were compelled to pay license fees amounting to \$1 per ton register, and give bond of \$1,000.

#### CANADA PROTESTS AGAINST REPUDIATION OF PLEDGES.

In view of the pledges which had induced royal assent to the Bill of 1887, the Canadian Government looked for a relinquishment of the position assumed by Newfoundland, and called the attention of the Newfoundland Government to the inconsistency of the unfriendly attitude, with the solemn assurances which had been given that the operations of Canadian fishermen would in no way be hampered under the provisions of the bait legislation.

No reply to these protests was given, although they were before the Newfoundland Government for almost a year. Canada had all along extended Newfoundland the fullest rights and privileges on Canadian shores, and maintained light service and fog signals on the Newfoundland coast free of charge upon shipping, while she exempts Newfoundland shipping from harbour and pilotage dues.

#### MODIFICATION OF LICENSE FEE.

Then Newfoundland made a slight modification in the license fee, which was fixed at one dollar per barrel of bait up to forty barrels, instead of a tonnage fee, which was left optional with the applicant.

This change was embodied in an extract from a minute of Newfoundland Council of 20th June, 1890, as follows: "From this date vessels requiring capelin or squid may, instead of paying tonnage license, obtain a license to purchase the particular quantity of bait they require by paying a license fee calculated at the rate of one dollar per barrel, but no vessel to take more than 40 barrels. You will observe that by the foregoing system vessels may enter as often as they require. Those vessels preferring to take bait under present system can do so."

This modification in no way removed the objections to the Act, however.

#### NEWFOUNDLAND'S PROCLAMATION OF 1891.

The *Royal Gazette* of Newfoundland, of the 20th of March, 1891, published the following proclamation:—

#### THE ROYAL GAZETTE.

##### EXTRAORDINARY.

*Published by Authority.*

ST. JOHN'S, NEWFOUNDLAND, 20th March, 1891.

##### PROCLAMATION.

T. O'BRIEN, Lieut.-Col., } By His Excellency Lieutenant-Colonel Sir J. Terence O'Brien,  
Governor. } Knight Commander of the Most Distinguished Order of St.



Michael and St. George, Governor and Commander-in-Chief in and over the Island of Newfoundland and its dependencies.

Whereas by my Proclamation of the 2nd day of April, A.D. 1890, I gave notice to all to whom it concerned, that from and after the 8th day of April of the same year, the Act passed in the fifty-second year of the reign of Her present Majesty, entitled "An Act to amend and consolidate the Laws relating to exportation and sale of bait fishes," should come into operation ;

And whereas by the fourth section of the said Act it is provided that "the Governor in Council may, from time to time, by proclamation, suspend or limit the operation of this Act, and the issue of licenses thereunder, in relation to any district or part of this colony, or the coasts thereof, and for such period and in relation to sale and exportation to such places, or for such purposes, and in such quantities as shall appear expedient and as shall be declared and defined in the proclamation ;"

And whereas under the said Act it is intended to issue licenses for the catching sale and purchase of bait ;

And whereas, it is expedient to limit the quantity of bait that any vessel, having obtained a license, shall be permitted to take or purchase under the said Act, in this colony, for the purpose of the fishery,—I do, therefore, by this my proclamation, declare that no vessel shall be permitted to take or purchase more than eight barrels of herring for each dory employed by such vessel, or ten barrels of capelin for each dory employed by such vessel, or four barrels of squid for each dory employed by such vessel ; and without a new license no vessel shall be permitted to take or purchase a further supply of herring bait within a period of eighteen days from date of previous license, or of capelin or squid bait within a period of fourteen days from the date of previous license.

And of these presents all magistrates, customs officers, constables and all other officers in the execution of their offices about the premises, and all and singular other persons whom it shall or may concern, are hereby required to take due notice and govern themselves accordingly.

Given under my hand and seal, at the Government House, St. John's, this nineteenth day of March, A.D. 1891.

By His Excellency's Command,

R. BOND,  
*Colonial Secretary.*

#### INSTRUCTIONS EXCLUDING CANADIANS.

Immediately following this proclamation came these instructions :—

*Instructions for Magistrates, Customs Officers, &c., in relation to enforcement of "Bait Act," 1889.*

Under proclamation of the Governor no exportation or sale, or purchase, or taking of bait fishes, of any sort, is to be permitted without a license.

Licenses of three sorts will be granted : One free of charge, to vessels belonging to Newfoundland, prosecuting the deep sea fishery, to purchase, haul or take bait fishes : one, to Newfoundland punt fishermen free of charge, to catch bait of sale to foreign vessels or otherwise : and one, free of charge, to American vessels to purchase bait.

In all cases of applications for licenses (except Newfoundland punt fishermen who catch for sale), the party applying must make an affidavit setting forth all the particulars required to be stated in the license. (*See Bait Act, 1889.*) This affidavit may be made either by the master of the vessel for which the license is applied for, or by the owner, or agent of the owner, or on behalf of the master. Blank forms of these affidavits, of each sort, are furnished. The affidavits may be made before a magistrate or a customs officer.

You will notice that the licenses have been signed by the Colonial Secretary, and they must be also signed by the person issuing the license, either a customs officer or magistrate.



No license shall be granted except to Newfoundland and United States fishing vessels, and before granting such license the customs officer or magistrate shall require to have produced to him the ship's register in the case of Newfoundland vessels, and in the case of United States vessels, the clearance papers from the American customs.

All vessels shall be restricted to eight barrels of herring per dory ; to ten barrels of capelin per dory, and to four barrels of squid per dory, and shall be compelled to take out a new license upon each entry into any port in this colony.

A second license to purchase or take herring bait shall not be granted within eighteen days from the date of the previous license, and a second license to purchase or take capelin or squid bait shall not be granted within fourteen days from the date of the previous license.

Upon granting a license to an American vessel, you shall notify the customs officers at all the other ports of entry, by telegram or letter, that you granted such license, stating date of issue, so as to prevent such vessel from obtaining a second license within the period stated above.

In the case of a vessel taking bait at your port, you will see that only the quantity named in license is taken aboard.

If a vessel is found supplying bait in contravention of the provisions of this Act, the license of said vessel shall be forfeited forthwith.

No American vessel is to be permitted to leave the port where she has baited unless the bait purchased has been iced down.

(Signed) R. BOND,  
*Colonial Secretary.*

Secretary's Office, 20th March, 1891.

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#### DISCRIMINATION AGAINST CANADA IN FAVOUR OF UNITED STATES.

Under these instructions, while licenses were to be issued to residents of Newfoundland and citizens of the United States free of charge, they were to be absolutely refused to all others, Canadians included, the wording being "*no license shall be granted except to Newfoundland and United States' fishing vessels.*"

Hitherto Canada's complaint against Newfoundland's action in connection with the bait question, had been confined to the imposition of license fees in direct and flagrant violation of the pledges which she had been prevailed upon to accept in order to assist Newfoundland in effecting legislation professedly directed against a Foreign nation. Now, however, she found herself positively excluded in British waters, from participation in the bait supply under any circumstances, while the citizens of another Foreign nation were heartily accorded free licenses, although the same ostensible reason for refusal would apply with equal force.

No indication of the intention of Newfoundland to refuse Canadian vessels even the restricted privileges under the Bait Act complained of, had reached the Canadian Government, and vessels sought the fishing grounds in the expectation of at least being able to procure licenses under the Act, but were precluded from securing the necessary bait.

#### TRAFFIC IN "FROZEN HERRING" STOPPED.

But this does not complete the measure of Newfoundland's action towards Canada, for by a strict interpretation of the term "bait fishes," a large and remunerative traffic in frozen herring for commercial purposes, which Canadian vessels had previously largely participated in, was entirely stopped by the refusal of the fish.

Thus Canada is not only denied the bait supply to enable her to the better pursue her fishing operations on the banks, but she is actually denied the right to purchase herring for any purpose.

In a recent letter to the London *Times*, Hon. Mr. Harvey said :—"The Canadian Government have long understood that a preliminary to their getting free access to Newfoundland bait supplies is the passing of a Bait Act similar to ours against the French."

The Newfoundland Government also ask Canada to assist them in enforcing their Bait Act against the French.

The Canadian Government long ago offered to legislate in the direction of preventing any possible violation of the Bait Act by Canadians, although it had not been successfully shown that Canadians had been in the habit of transgressing the law.

#### BREACHES OF ACT BY NEWFOUNDLANDERS.

On the contrary the breaches of the Act were made by Newfoundland fishermen themselves, who ran the blockade and took bait to the Islands of St. Pierre and Miquelon, some of them going to the Canadian Magdalen Islands for herring, which they carried to the French.

That this was thoroughly understood by the Newfoundland Government at the time, the following quotation from Sir Ambrose Shea's communication to the Colonial Office, dated 27th April, 1887, will show :—"The working clauses of the Act are such as local knowledge only could have wisely devised for its effective execution, and I may observe that they were adopted mainly by regard to their application to the limited number of our own people, by whom it was thought the chief efforts might be made to infringe on its provisions." It also shows the source from which the violations of the Act were to be expected.

#### REASONS ASSIGNED FOR NEWFOUNDLAND'S ACTION.

Newfoundland's hostility to Canada in this connection was sought to be justified on the grounds that Canada's action in selling bait to the French thwarted the object of the Bait Act, and that Canada had influenced Her Majesty's Ambassador in the interests of the Empire, to withhold sanction to a treaty designed to place United States' fishermen on a favourable footing in British waters to the detriment and exclusion of British subjects.

The preceding paragraph shows the first of these reasons to be, apparently, an afterthought.

#### POSITION OF THE CASE.

The Newfoundland Government still persists in a refusal of bait to our fishermen and bait fishes to our traders.

In the case of Mr. Henry Dicks, master of the schooner "Hattie," who alleges that he was most harshly and unjustly treated by the custom officials at Channel, Newfoundland, a formal claim to compensation for loss sustained was forwarded through the usual channel.

The law officers of the Crown have intimated that they were of opinion that the Government of Newfoundland was not empowered by the Act of 1887, nor entitled apart from that Act to refuse licenses to Canadians.

The Executive of Newfoundland declined to accept this opinion.

A draft of a joint case on behalf of Canada and Newfoundland was then prepared for submission to the Judicial Committee of Her Majesty's Privy Council under Sec. 4, Act 3 and 4, Vic. 4, Cap. 41.

An opinion has also been obtained to the effect :—

1. That the exacting of the license fees from Canadians was *ultra vires* and illegal.
2. That the amounts in each case may be recovered.



Preparatory to taking any action in this direction a statement is being prepared of all the fees paid by Canadian fishing vessels under the Bait Act.

The following notice has been published in newspapers of the Maritime Provinces :—

“NOTICE TO BANK FISHERMEN.

“The undersigned has been advised that the exaction of license fees from Canadian fishermen by the Government of Newfoundland during the fishing season of 1890 was illegal, and he intends to take such proceedings as are available to obtain redress on their behalf. For this purpose he respectfully requests that the owners or masters of all fishing vessels from whom license fees have been collected would place themselves in immediate communication with the nearest collector of customs and give him such full particulars of the matter as they can.

“Department of Marine and Fisheries,

“Ottawa, 9th January, 1892.

“CHARLES H. TUPPER,

“*Minister of Marine and Fisheries.*”

And to those who had already communicated to the Department on the subject of license fees, the following letter was sent :—

LETTER TO LICENSE HOLDERS.

SIR,—I herewith send you a form for the purpose of obtaining a statement of the amount of fees, &c., you paid to the Newfoundland Government during the year 1890 for licenses to purchase bait, &c., for your fishing vessel, and I have to request you to be good enough to fill up this form and sign the authority printed on the back of the same.

The Honourable the Minister of Marine and Fisheries being advised that the exaction of the fees in question was illegal, intends to take steps to recover them back for the fishermen.

I am, Sir, your obedient servant,

This phase of the question is in the hands of the Department of Justice.

THE IMPROVEMENT IN THE HERRING INDUSTRY.

To further support the advocacy of the improvement of the herring industry by a system of compulsory inspection which would induce the packers and curers to pay more attention to the manner in which the article is placed upon the market, the following quotation is taken from an able article on the fisheries of Newfoundland, published in the *Montreal Gazette*, of 9th February, 1892 :—

“The annual meeting of the Fisheries Commission was held a few days ago. The report for 1891 showed that excellent work in connection with the protection and improvement of our fisheries had been accomplished by the commission. Under their auspices, the herring fishery, hitherto of small value, has taken a new departure, and promises ere long to expand to such dimensions that it will rival our great cod fishery. Perhaps there has never been a more striking illustration of what can be done by the application of skill and intelligence to a fishing industry than in the present instance. Our herring fishery had been conducted in an ignorant, reckless fashion. The cure of herring, for the most part, was thoroughly bad, and they were packed in soft wood barrels from which too often the pickle oozed out, leaving the herring “rusted” or utterly spoiled. The consequence was that their character in foreign markets was so low that prices became unremunerative. No attempt was made to remedy this condition of things. It was supposed that the quality of our herring was naturally so inferior that they would not take the market. The Labrador herring, perhaps as fine herring as in the sea, treated in the slovenly way described, failed to find purchasers, except at low prices. Sometimes they were unsaleable. The art of herring curing was unknown, and no enquiries were made as to the proper method of cure to suit different markets.



"The Fisheries Commission took up the matter, and in Mr. Nielsen, the super intendent of fisheries, they fortunately had found a man who had a thorough knowledge of the herring industry, and understood all about the proper methods of cure for different markets. He drew up a pamphlet on "The Cure of Codfish and Herring," of which the commission printed and circulated 2,000 copies. This produced a considerable impression, but more was needed than verbal instruction. Accordingly the commission requested Mr. Nielsen to proceed to Sound Island, Placentia bay, and there have 100 barrels packed under his own supervision. Portions of these were shipped to Hamburg, New York and Chicago. They met a ready sale and brought seven and eight dollars per barrel. The consignees wired for more of the same cure and packing. I may mention that Mr. Nielsen packed them in birch barrels with iron hoops.

"This practical demonstration of what could be done with our herring, when cured properly, turned the scale. Five of our leading firms embarked at once in the herring fishery, adopting Mr. Nielsen's method of cure, and in the Placentia Bay fishery, since early in December, the work has been going on briskly and thousands of barrels have been packed. They are meeting a ready sale both in the United States, where a dollar per barrel of duty is paid, and in Germany, where the duty is only nominal. They compete successfully with the best Scotch and Norwegian herring, and in many instances bring higher prices—eight and nine dollars per barrel being often reached. One of our merchants to-day showed me a sample of the best Norwegian herring which is sold in the States, and alongside he placed Placentia Bay herring of his own cure. The latter were decidedly finer in appearance, larger and plumper, and when cut so as to show the flesh, have undoubtedly the advantage in regard to the cure.

"The commencement thus made will be vigorously followed up in all our other bays, especially in Fortune Bay, where herring is so abundant and fine that it has been called "The home of the herring." Mr. Nielsen's explorations have led him to the conclusion that all our great bays are equally the "home of the herring," and that in all a herring fishery may be established. He holds that the migratory movement of the herring are but limited, and that each bay holds its own colony, which remain there the year round, moving from deep to shallow water, and *vice versa*, according to temperature, food and reproductive functions; but never leaving the bays for any length of time. This holds good on the eastern shores of the island; on the west the case is somewhat different, as there he found banks where the herring resort in summer, and where a drift net summer fishery could be established.

"In past years the Americans have made immense profits out of our herrings in Fortune and Placentia Bays. Hundreds of their vessels frequented these waters in winter, and loaded cargoes of frozen herring which they obtained at the rate of from 50 to 70 cents per barrel, which, with their measures, holding a barrel and a half, left but scanty profits to the poor fishermen. All that will now be changed. The great bulk of the herring will be cured and exported. Prices will rise, more employment will be given in handling the herring in making barrels, in securing freights for our vessels. The frozen herring trade with the States will diminish. It is now placed beyond a doubt that our herring fishery if skilfully prosecuted, and duly regulated and preserved from abuses, may become a large and profitable industry, second only to that of the cod. The commission have drawn up enactments for the regulation of this fishery which will be submitted to the Legislature. But for the efforts of the commission all this would probably have lain dormant for many years to come."

This should set at rest the question of the practicability of improving the quality of cured herring placed upon the markets by both the Newfoundland and Canadian curers and dealers, as it proves beyond all question that care and attention will enable them to compete favourably with the best article; and that the difficulty is not from any inferiority of the fish but must be looked for in the methods of curing.

This question was most fully discussed in the departmental reports for the past two years. In that of 1889, the report of delegates appointed to enquire into the herring fishing industry of Great Britain and Holland was printed.

## THE MACKEREL FISHERY.

Lieutenant Gordon, commander of the fisheries protection fleet, reports the mackerel fishery to have been during the season of 1891, fairly successful in Canadian waters, while on the coasts of the United States some signs of improvement were to be noticed, large numbers of immature fish having been taken there.

Since the closure of the Canadian inshore fisheries to United States fishing vessels, the New England mackerel fishing fleet has become smaller, only 43 vessels being engaged in that business this season. Thirty-six of these visited either Cape Shore or North Bay, and caught off Canadian coasts 6,824 barrels of mackerel. Although this catch is less than that of the previous year in the aggregate, it represents an increase of about 60 barrels per vessel engaged.

The following table, taken from the seventeenth annual report of the Boston Fish Bureau, shows the prices ruling in the State of Massachusetts for mackerel of each grade from 1834 up to date :—

## PRICES OF MACKEREL IN MASSACHUSETTS.

SHOWING the Price per Barrel of each grade of Pickled Mackerel in the first week of September, from 1834 to 1891.

Year.	No. 1.	No. 2.	No. 3.	Year.	No. 1.	No. 2.	No. 3.	Bay Catch to 1st Sept.	Shore Catch to 1st Sept.
	\$ cts.	\$ cts.	\$ cts.		\$ cts.	\$ cts.	\$ cts.	Brls.	Brls.
1834.....	5 72	4 72	3 35	1870—bay.....	21 20	11 00			
1835.....	7 00	6 00	4 00	shore...	23 00	9 75			
1836.....	9 00	8 00	5 00	1871—bay.....	10 50	7 50	5 50		
1837.....	7 75	6 50	4 12	shore...	11 25	7 25	6 25		
1838.....	11 00	9 25	5 50	1872—bay.....	11 50	9 25	7 00		
1839.....	12 50	10 50	7 00	shore...	14 50	9 50			
1840.....	12 75	10 50	5 50	1873—bay.....	14 75	12 25	9 00		
1841.....	12 00	10 00	6 00	shore...	20 00	12 25			
1842.....	9 00	6 00	4 00	1874—bay.....	15 00	8 00	7 00		
1843.....	10 12	8 12	6 00	shore...	13 25	9 00	7 00		
1844.....	9 50	7 50	5 50	1875—bay.....	14 00	11 00			
1845.....	13 00	10 50	6 87	shore...	16 25	10 25	7 50		
1846.....	9 12	6 25	3 87	1876.....	15 00	6 75	5 50		
1847.....	12 75	8 25	4 25	1877.....	16 50	12 50	8 00		
1848.....	9 00	6 00	3 37	1878.....	18 00	8 00	5 00		
1849.....	12 00	7 00	3 50	1879.....	16 00	5 00	3 00		
1850.....	10 12	8 12	5 00	1880.....	14 00	7 00	4 00		
1851.....	10 00	6 50	5 12	1881.....	14 00	6 00	4 00		
1852.....	9 00	7 00	5 75	1882.....	18 00	11 00	8 00		
1853.....	11 50	9 50	7 50	1883.....	20 00	14 00	10 50		
1854.....	15 00	12 25	5 00	1884.....	14 00	19 00	3 50		
1855.....	19 00	11 00	6 25	1885.....	13 75	5 75	3 75		
1856.....	13 00	8 00	6 00	1886—bay.....	16 00	11 50	9 50	30,000	
1857.....	15 00	12 50	8 50	shore...	22 00	12 50			10,083
1858.....	15 50	12 50	8 50	1887—bay.....	15 00	13 00	11 00	10,776	
1859.....	14 50	12 59	8 50	shore...	17 50	14 00	11 00		28,629
1860.....	16 00	8 50	5 00	1888—bay.....	20 00	18 50	16 00	9,992	
1861.....	8 50	4 50	2 75	shore...	22 00	18 50	14 00		10,000
1862.....	8 25	6 00	4 50	1889—bay.....	24 00	21 00	16 00	577	
1863.....	14 00	9 25	6 50	shore...	28 00	25 00	17 00		6,443
1864.....	30 00	20 00		1890—bay.....	19 00	17 00	10 00		
1865.....	22 00	15 00	9 75	shore...	21 00	17 50	13 00		5,655
1866.....	22 75	13 25		1891—bay.....					
1867.....	17 00	12 25	7 50	shore...	18 00	13 00	8 00		20,147
1868.....	17 00	13 00							
1869.....	23 00	11 50							



## BEAM TRAWLING.

Part IV of the report of the Department of Fisheries for 1889, which consisted of a report by the delegates appointed to enquire into the herring fishing industry of Great Britain and Holland, at page 51, referred to the subject of beam trawling, as practised around the British coasts. The question was quite fully discussed, and extracts from reports of Parliament committees of enquiry, and from writings of other authorities, were quoted. The conclusion was that beam trawling was most injurious to the herring fisheries, by reason of its disturbing the herring, scaring the shoals from the fishing grounds and destroying the spawn.

The seventeenth annual report of the Boston Fish Bureau contains an account of Captain Alfred Bradford's experiment with the beam trawl off the coast of Massachusetts, in the spring of 1891, the success of which resulted in the construction of the trawler "Resolute." This vessel is described as similar to those at present employed on Dogger Bank, in the North Sea, by British fishermen. The report states that the catch of the "Resolute" was unprecedentedly large, and gives the following figures: 16,000 lbs. haddock, 1,000 lbs. hake, 1,500 lbs. lemon soles, 2,000 lbs. witch soles, 1,500 lbs. turbot, 500 lbs. cod, 300 lbs. sturgeon, 600 lbs. butterfish, 160 lbs. squid, and 5,000 lbs. plaice. Some of the fish when landed were in poor condition, which is thought to have been caused by the crowding of the fish together coming in contact with the net; but the flat fish, of which the beam trawl makes such great hauls, is not, however, injured in this manner. This method of fishing, the Bureau considers, will introduce in the Boston market new species of flat fish which have hitherto been little known.

In view of the opinions expressed in England, it is questionable whether, if these beam trawls are operated in localities where other established fisheries are conducted, the advantage to the market from the introduction of new species of flat fish will compensate its probable injurious effects upon the other fisheries.

In localities, however, where this method of fishing would not be likely to injure any other fisheries, or where such other fisheries are not carried on, the advantages mentioned by the Fish Bureau might warrant the introduction of beam trawling. Otherwise, however, the growth of this mode of fishing might call for serious consideration.

## BAYVIEW LOBSTER HATCHERY.

Under the heading of lobsters, in last year's report, it was stated that the superintendent of fish culture had visited Newfoundland and made personal enquiries into the results of the experiments there in lobster hatching; that a site had been selected in Nova Scotia, and that it was expected to have a first-class lobster hatchery fully equipped and in full working order by the present season.

It is gratifying to be able to report that these expectations have been realized, and that most successful operations in the artificial hatching of lobsters have resulted at the Bayview lobster hatchery in Pictou county, Nova Scotia.

This establishment is situated at Bayview, about 5 miles from the Town of Pictou, and is most admirably located for all purposes connected with this new industry.

The building proper is 75x35 feet, and the breeding apparatus is capable of accommodating about 90 millions of ova.

It is provided with a 20 horse-power steam boiler and duplex pump for supplying the hatchery with salt water from the bay. A wharf or pier is constructed extending



out into the bay until a depth of 20 feet of water is reached. This pier is to accommodate tugs or other craft which may be employed collecting or delivering lobster eggs from neighbouring canneries, or distributing the fry when hatched out.

Owing to the late date at which the building and machinery were completed, the active operations in lobster hatching covered a period of only some 18 days.

The Superintendent of Fish Culture planned and conducted the operations, assisted by Mr. William Parker from the Sandwich, Ontario, hatchery, the services of the latter officer being called into requisition on account of his experience in working the automatic glass incubators in connection with his whitefish hatching operations. After Mr. Parker's departure, Mr. Alfred Ogden assumed charge of the hatchery.

The appliances and methods adopted at this establishment are entirely novel as applied to lobster hatching, being the first of their kind in America, and the success attending the present short season's operations is highly gratifying.

Some 7,000,000 of lobster fry were hatched out and distributed; these being collected from the cannery of Messrs. Burnham and Morrel, which is situated a short distance from the factory of Messrs. Hamlin & Co., of Carriboo, Messrs. Hogg, Craig & Co., and McCure, of Pictou Island.

With more skilled assistance in the collection of eggs, there is every reason to expect that in a full season's operations, the number of fry which could be turned out of this hatchery would be limited only by the supply of eggs obtainable.

Further details respecting this establishment will be found in the report of the superintendent of fish culture, and in that of Mr. Ogden appended thereto, which will be printed in the supplement to this report.

It might be incidentally mentioned that according to recent information, Mr. Neilsen, who has charge of the sea fish hatchery operations in Newfoundland, succeeded during the past year in hatching the enormous number of 551,000,000 of lobster eggs taken from the factories, which, otherwise, would have been destroyed.

#### FISHING BOUNTIES, 1890.

The payments made for this service are under the authority of an Act passed in 1882 (chapter 96, Revised Statutes) intitled: "An Act to encourage the development of the sea fisheries and the building of fishing vessels," which provides for the payment of a sum of \$150,000 annually, under regulations to be made from time to time by the Governor in Council.

The total number of bounty claims received for the year 1890, was 18,071, against 17,119 in 1889, an increase of 952 claims for the year. Of the total number of claims received, 317 were rejected for non-compliance with the regulations.

The number of claims paid during the year 1890, was 17,959, which includes 213 claims for 1889 and previous years rejected and held in abeyance for investigation, the correctness of which was established, showing an increase of 881 claims as compared with the year 1889.

The total amount of bounties paid in 1890, on the basis of \$1.50 per ton to vessels, and \$3.00 per man to boat fishermen, and \$1.00 per boat to the owners thereof, was \$158,241.01, being \$285.53 less than the previous year.

The number of vessels which received bounty in 1890, was 739, with a tonnage of 28,268 tons, a decrease of 94 vessels and a tonnage of 4,448 tons as compared with the year 1889.

The number of boats on which bounty was paid was 17,168, and the number of fishermen who received bounty was 33,245, an increase of 938 boats and 1,720 fishermen over the year 1889.

The total number of fishermen in vessels and boats, to whom bounty was paid during the year 1890, was 39,050, as against 38,343 in 1889.

For details of payments to vessels and boats, see Appendix No. 2.

The following statement in connection with fishing bounty payments since the year 1882, shows :—

1. Year when bounty was established, 1882.

2. Number of claims per year, as follows :—

In 1882.....	11,972, representing	29,932 fishermen.		
1883.....	13,086	do	33,399	do
1884.....	12,468	do	31,297	do
1885.....	14,124	do	33,564	do
1886.....	14,900	do	33,523	do
1887.....	15,416	do	34,387	do
1888.....	15,599	do	34,887	do
1889.....	17,078	do	38,343	do
1890.....	17,959	do	39,050	do
Total.....	<u>132,597</u>	do	<u>308,352</u>	do

3. Amount of bounty paid per year, as follows :—

In 1882.....	\$172,285 47	In 1887.....	\$163,757 92
1883.....	130,344 85	1888.....	150,185 53
1884.....	155,718 98	1889.....	158,526 54
1885.....	161,539 39	1890.....	158,241 01
1886.....	160,903 59		
Total amount of bounty paid.....			<u>\$1,411,503 28</u>

4. Proportion of bounty per head :—

In 1882 vessels were paid at the rate of \$2 per ton, one-half being payable to the owner and the other half to the crew.

Boats were paid on the basis of \$5 per man, one-fifth of which went to the owner and four-fifths to the men.

In 1883 the rate to vessels was \$2 per ton, and paid as in 1882. The basis of payment to boats was \$2.50 per man, one-fifth of which was paid to the owner and four-fifths to the men.

In 1884 vessels were \$2 per ton, as in 1882 and 1883; and owners of boats were paid as follows :—

On boats from 14 feet keel to 18 feet keel.....	\$1 00
do 18 do 25 do .....	1 50
do 25 do upwards.....	2 00

And boat fishermen \$3 each.

In 1885 vessels were paid \$2 per ton as in previous years. The rate to boats was the same as in 1884, with the admission of boats measuring 13 feet keel. Boat fishermen \$3 each.

In 1886 and 1887 the rate to vessels and boats remained the same as in 1885.

In 1888 vessels were paid at the rate of \$1.50 per ton, one-half to owner and one-half to crew, as formerly. Boats remained the same as in 1885-86-87, and boat fishermen \$3 each.

In 1889 the rate to vessels remained the same as in 1888. Owners of boats were paid \$1 per boat and boat fishermen \$3 per man. These rates also formed the basis of payments for the year 1890.

The total number of vessels paid is 7,434 (with a tonnage of 283,465 tons), and the number of crew 59,373.

Average number of men per vessel, 8.

The total number of boats paid is 125,111 and boat fishermen 248,979. Average number of men per boat, 2.

5. The highest bounty paid per head to vessel fishermen was \$17.50, the lowest 83 cents.

The highest bounty paid per head to boat fishermen was \$4, the lowest being \$2.

The general average paid per head, \$4.58.

### THE FISHERY LAWS OF THE DOMINION.

TABLE of Close Seasons in force on 31st December, 1891.

Kinds of Fish.	Ontario.	Quebec.	Nova Scotia.	New Brunswick	Prince Edward Island.	Manitoba and N.W. Territories.	British Columbia.
Salmon (net fishing).....	.....	Aug. 1 to May 1.	Aug. 15 to Mar. 1.	Aug. 15 to Mar. 1.	.....	.....	.....
Salmon (angling).....	.....	Aug. 15 to Feb. 1.	Aug. 15 to Feb. 1.	Aug. 15 to Feb. 1.	.....	.....	.....
Speckled Trout ( <i>Salvelinus Fontinalis</i> ). Salmon Trout.....	Sept. 15 to May 1. Oct. 15 to Nov. 30.	Oct. 1 to Dec. 31. Oct. 15 to Nov. 30.	Oct. 1 to Apr. 1. Oct. 15 to Nov. 30.	Sept. 15 to May 1. Oct. 15 to Nov. 30.	Oct. 1 to Dec. 1. Oct. 15 to Nov. 30.	Oct. 1 to Jan. 1. .....	Oct. 15 to Mar. 15. Oct. 15 to Mar. 15.
Large Grey Trout, Lunge, Touladi and Land-locked Salmon. Ouananiche.....	.....	Oct. 15 to Dec. 1. Sept. 15 to Dec. 1.	Oct. 1 to Apr. 1.	Sept. 15 to May 1.	.....	.....	Oct. 15 to Mar. 15.
Pickarel (Doré).....	Apr. 15 to May 15.	Apr. 15 to May 15.	.....	.....	.....	Apr. 15 to May 15.	.....
Bass and Maskinongé . . .	Apr. 15 to June 15.	Apr. 15 to June 15.	.....	.....	.....	.....	.....
Sea Bass. ....	.....	.....	Mar. 1 to Oct. 1.	Mar. 1 to Oct. 1.	.....	.....	.....
Whitefish.....	Oct. 15 to Nov. 30.	Oct. 15 to Nov. 30.	Oct. 15 to Nov. 30.	Oct. 15 to Nov. 30.	Oct. 15 to Nov. 30.	Oct. 5 to Nov. 30.	.....
Smelts. ....	.....	Apr. 1 to July 1.	Apr. 1 to July 1.	Apr. 1 to July 1.	Apr. 1 to July 1.	.....	.....
Lobsters.....	.....	July 15 to Dec. 31.	July 1 to Dec. 31.	July 1 to Dec. 31.	July 15 to Dec. 31.	.....	.....
.....	.....	.....	On Atlantic coast, from Cape Canso to boundary line, U.S., July 15 to Dec. 31, in remaining waters of Nova Scotia and New Brunswick.				.....
Sturgeon.....	May 15 to July 15.	May 15 to July 15.	May 15 to July 15.	May 15 to July 15.	May 15 to July 15.	May 15 to July 15.	May 15 to July 15.
Oysters.....	.....	June 1 to Sept. 15.	June 1 to Sept. 15.	June 1 to Sept. 15.	June 1 to Sept. 15.	.....	.....
Fresh Water Herring and Ciscoes.	Oct. 15 to Nov. 30.	.....	.....	.....	.....	.....	.....



## SYNOPSIS OF FISHERY LAWS.

Net fishing of any kind is prohibited in public waters, except under lease or license.

The size of nets is regulated so as to prevent the killing of young fish. Nets cannot be set or seines used so as to bar channels or bays.

A general weekly close-time is provided in addition to special close-seasons.

The use of explosive or poisonous substances for catching or killing fish is illegal.

The use of fire-arms for killing fish is prohibited.

Mill dams must be provided with efficient fish passes. Models or drawings will be furnished by the department on application.

The above enactments and close-seasons are supplemented in special cases, under authority of the Fisheries Act, by a total prohibition of fishing for stated periods.

## CONCLUSION.

In conclusion, it may be stated that such of the reports and statistics of the different officers throughout the Dominion, which will appear in a supplementary report, and which are at the time of writing available, afford ample justification for the prediction of a large increase in the total yield and value of the fishing industry of Canada, during the year 1891.

I have the honour to be, Sir,

Your obedient servant,

S. P. BAUSET,

*Acting Deputy Minister of Fisheries.*

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PART I.

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APPENDICES.

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## APPENDIX No. 1.

## SCHEDULE of Fishery Officers in the Dominion of Canada for the Year 1891.

## — PROVINCE OF ONTARIO.

Name.	Rank.	P. O. Address.	Extent of Jurisdiction.
Thomas A. Keefer . . .	Overseer. . .	Port Arthur . . . . .	The waters of Lake Superior and its tributaries from Pigeon River to Sault Ste. Marie.
.....	do . . . .	Manitowaning. . . . .	That portion of the waters of Georgian Bay, extending from Manitowaning to and including, South Bay, also the waters surrounding Club, Lonely, Fitz, William and other Islands in the neighbourhood of Manitoulin Island.
J. K. McDonald. . . . .	do . . . .	Toronto . . . . .	Lake Kagewong, Manitoulin Island.
Isaac Turner. . . . .	do . . . .	Little Current . . . .	That portion of the waters of the North Channel of Lake Huron, in the vicinity of Little Current.
Robert Boyter. . . . .	do . . . .	Gore Bay. . . . .	That portion of the waters of the North Channel of Lake Huron, in the vicinity of Gore Bay, Manitoulin Island.
.....	do . . . .	Algoma Mills. . . . .	That portion of the waters of the North Channel of Lake Huron, in the vicinity of Algoma Mills.
Frank Prout. . . . .	do . . . .	Bruce Mines. . . . .	That portion of the waters of the North Channel of Lake Huron, in the vicinity of Bruce Mines.
.....	do . . . .	Marksville. . . . .	That portion of the waters adjoining St. Joseph and other Islands, in the North Channel of Lake Huron.
D. Cameron . . . . .	do . . . .	Killarney . . . . .	That portion of the waters of Georgian Bay, extending from Collin's Inlet on Whitefish River, including Squaw Island and the surrounding waters.
.....	do . . . .	Victoria Harbour. . .	That portion of the waters of Georgian Bay, extending from Point Marks to Collin's Inlet, with islands opposite, and including the mouths of Severn and Muskoka Rivers.
John Donaldson. . . . .	do . . . .	Collingwood . . . . .	That portion of the waters of Georgian Bay, extending from Point Boucher to Point Marks, including Christian, Beckwith and other Islands and the surrounding waters ; also Nottawasaga River.
G. S. Miller . . . . .	do . . . .	Owen Sound. . . . .	That portion of the waters of the Georgian Bay, extending from Colpoy's Bay to Point Boucher.
.....	do . . . .	Wiarton. . . . .	That portion of the waters of Georgian Bay, extending from Cape Hurd to and including Colpoy's Bay, also the waters surrounding White Cloud, Griffith's and Hay Islands.
John Hoar. . . . .	do . . . .	Lafontaine. . . . .	About 18 miles of the waters of Georgian Bay, around Christian Island.
R. H. Murray . . . . .	do . . . .	Allenford . . . . .	About 70 miles of the waters of Lake Huron, from Cape Hurd to Southampton, beside the inland waters of the County of Bruce, south of division line between Amable and Albermarle, comprised within an area of about 800 square miles.
H. W. Ball. . . . .	do . . . .	Goderich . . . . .	About 60 miles of the waters of Lake Huron, from Southampton to Goderich.
H. B. Quarry. . . . .	do . . . .	Parkhill . . . . .	About 65 miles of the waters of Lake Huron, extending from Goderich to Blue Point.

SCHEDULE of Fishery Officers, &c.—*Continued.*PROVINCE OF ONTARIO—*Continued.*

Name.	Rank.	P. O. Address.	Extent of Jurisdiction.
J. C. Pollock .....	Overseer...	Forest... ..	About 45 miles of the waters of Lake Huron and St. Clair River, extending from Blue Point, on Lake Huron, to Baby's Point in River St. Clair.
C. W. Raymond .....	do .....	Mitchell's Bay...	About 30 miles of the waters of Lake St. Clair, from Little Lake to its head.
Joseph Boismier .....	do .....	Sandwich .....	The waters of Lake St. Clair, from the division line between the Townships of Dover West and Dover East to the mouth of Detroit River, and from thence to its outlet.
Wm. Prosser .....	do .....	Leamington ...	About 50 miles of the waters of Lake Erie, from the mouth of Detroit River to Point Pelee.
David Girardin .....	do .....	Point Pelee.....	About 50 miles of the waters of Lake Erie, around Point Pelee Island and adjacent islands.
Horace Bartlett .....	Warden ...	North Harbour Is- land.	About 20 miles of the waters of Lake Erie, around North Harbour and Middle Sister Islands.
John McMichael .....	Overseer...	Blenheim.....	About 110 miles of the waters of Lake Erie, fronting on the Counties of Kent and Elgin.
David Sharp .....	do .....	Port Ryerse .....	About 70 miles of the waters of Lake Erie, fronting on the Counties of Norfolk and part of Haldimand as far as South Cayuga.
W. A. McCrae.....	do .....	Dunnville .....	About 10 miles of the waters of Lake Erie, from Cayuga to Moulton Bay and Grand River (30 miles), from mouth to Caledonia.
Charles W. Evans .....	do .....	Cayuga .....	The waters of Grand River, from the Division Line between North Cayuga and Canborough, on the east, to Caledonia, on the west.
Geo. Price.....	do .....	St. Williams. ....	About 30 miles of the waters of Lake Erie, around Long Point Island.
Fred. Kerr .....	do .....	Hamilton .....	About 50 miles of the waters of Lake Ontario, from Brant House, Burlington Beach, to Niagara, including the Niagara River, 50 miles; in all, 100 miles.
Wm. Sargent.....	do .....	Bronte .....	About 20 miles of the waters of Lake Ontario, extending from Port Credit to Burlington Beach, at Brant House.
Wm. Helliwell.....	do .....	Highland Creek...	About 26 miles of the waters of Lake Ontario fronting on the County of York.
Chas. Gilchrist.....	do .....	Port Hope.....	About 40 miles of the waters of Lake Ontario fronting on the County of Northumberland. Together with Rice Lake and tributaries, about 60 square miles of water.
W. P. Clarke.....	do .....	Belleville.....	Bay of Quinté, comprising about 80 miles of coast line of Counties of Prince Edward and Hastings, from Carrying Place to opposite Mill Point.
Joseph Redmond.. ..	do .....	Picton.....	About 90 miles of the waters of Lake Ontario fronting on the County of Prince Edward.
A. D. Sills.....	do .....	Napanee.....	About 35 miles of the waters of Lake Ontario fronting on the Counties of Lennox and Addington, and upper part of Amherst Island; also the inland waters of the Counties of Lennox and Addington, comprised within an area of about 1,600 square miles.
R. R. Finkle.. ..	do .....	Bath.....	About 25 miles of the waters of Lake Ontario fronting on the Township of Earnestown in the Counties of Lennox and Addington, and the lower part of Amherst Island.
A. H. Crosby.....	do .....	Forest.....	That portion of the waters of the Bay of Quinté from Three Brothers' Island, near Kingston, to Trenton, at the head of the Bay.
Peter Kiel.....	do .....	Wolfe Island.....	About 60 miles of the waters of Lake Ontario around Wolfe, Simcoe, Horseshoe and Pigeon Islands.

SCHEDULE of Fishery Officers, &c.—*Continued.*PROVINCE OF ONTARIO—*Continued.*

Name.	Rank.	P. O. Address.	Extent of Jurisdiction.
Thomas Merritt.....	Overseer....	Kingston.....	About 20 miles of the waters of Lake Ontario fronting on the Township of Pittsburgh and Kingston, County Frontenac, including part of Bay of Quinté and River St. Lawrence.
John Cox.....	do .....	Howe Island.....	About 16 miles of the waters of Lake Ontario and River St. Lawrence, around Howe Island.
Nassau Acton.....	do .....	Gananoque.....	About 6 miles of the waters of the River St. Lawrence, from Howe Island to Jack Straw Lighthouse, together with the waters around Admiralty group of Islands; also, Gananoque River, comprising 10 miles inland waters.
J. G. Wallace.....	Warden....	Ivy Lea.....	About 10 miles of the waters of the River St. Lawrence, extending from Jack Straw Light-House to Rockport, including the islands therein.
Henry Hunt.....	do .....	Rockport.....	About — miles of the waters of River St. Lawrence around LaRue's Island.
John H. Davis.....	do .....	Gananoque.....	About — miles of the waters of the River St. Lawrence, extending from Sheriff's Point to head of Grenadier Island.
Wm. Pool.....	Overseer....	Rockport.....	About 32 miles of the waters of the River St. Lawrence, extending from Rockport to Prescott.
Sydney Pattison.....	Warden....	do .....	About 32 miles of the waters of the River St. Lawrence from Gananoque to Brockville.
John Mooney.....	Overseer....	Maitland.....	About 60 miles of the waters of the River St. Lawrence from Brockville to Cornwall.
Robt. P. Boyd..	do .....	Lyn .....	About 6 miles of the waters of the River St. Lawrence, extending 3 miles above and 3 miles below Cole's Shoal Lighthouse.
T. McGarity.....	do .....	Cornwall.....	About 40 miles of the waters of the River St. Lawrence, fronting on the Counties of Stormont and Glengarry.
Pierre St. Pierre.....	do .....	St. Eugene..	About 40 miles of the waters of the Ottawa River extending from Point Fortune to Wendover, in the County of Prescott.
Olivier Miron.....	do .....	Plantagenet .....	The waters of the South Nation River, County of Prescott, comprising about 50 miles of inland waters.
W. W. Boucher.....	do .....	South March .....	The waters of the Ottawa River and its tributaries, extending from Ottawa to the town line boundary of Fitzroy Township, in the County of Carleton.
John Grant.....	do .....	Forester's Falls .....	The Ottawa River, extending from the head of Allumette Rapids to Mattawa.
Archibald, Acheson.....	do .....	Westmeath .....	About 25 miles of the Ottawa River, comprising Lower Allumette and Coulange Lakes.
J. S. Richardson.....	do .....	Sturgeon Falls.....	The waters of Lake Nipissing, Mattawa River and French River and tributaries.
.....	do .....	Bracebridge.....	Inland waters of the Townships of Watt, Stephenson, Brunnel, Franklin, Monk, McAulay, McLean, Ridout, Muskoka, Draper, Oakley, Morrison and Ryde, in the District of Muskoka, comprised within an area of about 1,000 square miles.
Geo. R. Steele.....	do .....	Lorimer Lake.....	The inland waters of the Townships of Cowper, Foley, Christie, McDougall, McKellar, Ferguson, Carling, Shawanaga, Burpee, Hagerman, Brown and Wilson, in the Districts of Muskoka and Parry Sound, comprised within an area of about 1,000 square miles.



SCHEDULE of Fishery Officers, &c.—*Continued.*PROVINCE OF ONTARIO—*Continued.*

Name.	Rank.	P. O. Address.	Extent of Jurisdiction.
J. G. Rumsey.....	Overseer....	Huntsville .....	The inland waters of the Townships of Chaffey, Cardwell, Stisted, Sinclair, Bethune, Monteith, McMurrich, Perry, Spence, Ryerson, Armour and Proudfoot, in the Districts of Muskoka and Parry Sound, comprised within an area of about 1,000 square miles.
Wm. Lockhart.....	do .....	Denville.....	The inland waters of the Townships of Croft, Chapman, Strong, Jolly, Ferries, Lount, Machar, Laurier, Mills, Pringle, Gurd and Himsworth, in the Districts of Muskoka and Parry Sound, comprised within an area of about 1,000 square miles.
Henry W. Gill.....	do .....	Ufford.....	Lakes Rosseau and Skelton, in the County of Simcoe and Districts of Muskoka and Parry Sound.
Henry Castle.....	do .....	Gravenhurst.....	Lakes Muskoka and Joseph, in the County of Simcoe.
L. S. Sanders.....	do .....	Barrie.....	About 110 miles of the waters of the north shore of Lake Simcoe and its tributaries, Couchiching and Holland Rivers.
Geo. Clarke.....	do .....	Orillia.....	The waters of Lake Couchiching and Severn River, in the Counties of Simcoe, Muskoka and Ontario.
Wm. McDermot.....	do .....	Beeton.....	The inland waters of the South Riding of the County of Simcoe, comprised within an area of about 900 square miles.
H. McFayden.....	do .....	Durham.....	The head waters of Saugeen River and tributaries, comprising an area of about 1,000 square miles.
Patrick McCarron .....	do .....	Wallaceburg.....	The waters of Sydenham River and tributaries, comprising about 65 miles.
Orrie Bishop.....	do .....	Wilkesport.....	The north branch of Sydenham River, from junction with main river to its sources, comprising about 20 miles.
Peter McCann.....	do .....	London.....	About 65 miles of the River Thames, from Wardsville to London.
John Crotty.....	do .....	Bothwell.....	About 25 miles of the River Thames, extending from Wardsville to Lewisville.
Timothy McQueen.....	do .....	Chatham.....	About 25 miles of the River Thames, from Lewisville to its mouth.
W. P. Croome.....	do .....	Brantford.....	About 150 miles of the waters of the Grand River and its tributaries, from Brantford upwards.
W. B. Jelly.....	do .....	Mount Forest.....	The inland waters of the North Riding of the County of Wellington, comprised within an area of about 600 square miles.
Andrew Hughson.....	do .....	Orangeville.....	About 25 miles of the waters of River Credit, extending from Orangeville to Norval; together with the inland waters of the Townships of Mono, East Garafraxa, Amaranth, Albion and Luther, comprised within an area of about 500 square miles.
Robert Stewart .....	do .....	Claude.....	The inland waters of the County of Cardwell, comprised within an area of about 400 square miles.
Wellington Hull.....	do .....	Erin.....	The inland waters of the Townships of Eramosa, Erin, Caledon and Esquesing, comprised within an area of about 400 square miles.
Alex. Blakely.....	do .....	Port Credit.....	About 15 miles of the waters of the River Credit—from Norval to its mouth, in the County of Peel.
Nelson, Simmons .....	do .....	Meyersburg.....	The waters of Trent River, in the Counties of Northumberland and Hastings, comprising about 80 miles.

SCHEDULE of Fishery Officers, &c.—*Continued.*PROVINCE OF ONTARIO—*Continued.*

Name.	Rank.	P. O. Address.	Extent of Jurisdiction.
.....	Overseer.....	.....	The inland waters of the North Riding of the County of Victoria, lying north of Fenelon Falls, and comprised within an area of about 800 square miles.
Geo. B. McDermott ...	do ....	Port Perry.....	About 22 miles of the waters of Lake Ontario, fronting on the County of Ontario, together with Lake Scugog, including Lindsay and Scugog Rivers, in the Counties of Durham, Victoria and Ontario, about 50 miles.
J. C. Bowen.....	do ....	Marmora.....	Crow Lake, Belmont Lake and Crow River, in the Counties of Hastings and Peterboro'.
Geo. W. Fitzgerald.....	do ....	Lakefield.....	The inland waters of the County of Peterboro', within the townships of Harvey, Burleigh, Dummer, Douro, Smith and Ennismore.
David Breeze.....	do ....	Peterboro'.....	Otonabee River, extending from Peterboro' to Rice Lake, in the County of Peterboro'.
Wm. Gainforth.....	do ....	Haliburton.....	The waters of Gull and Burnt Rivers and tributaries, together with Drag, Eagle, Moose, Redstone, Crooked and other lakes, lying within the East Riding of the County of Peterboro', and comprised within an area of about 400 square miles.
B. H. Sweet.....	do ....	Bancroft.....	The inland waters of the Townships of Wollaston, Limerick, Cashel, Farraday, Dunganon, Mayo, Herschel, Monteagle, Carlow, McClure, Wicklow, Bangor, in the County of Hastings, and comprised within an area of about 1,000 square miles.
H. R. Purcell.....	do ....	Colebrook.....	The inland waters of the Townships of Camden, Portland, Loughboro', Sheffield and Kennebec, in the Counties of Addington and Frontenac, comprised within an area of about 500 square miles.
Robt. A. Gilbert.....	do ....	McLaren Depot...	The inland waters of the Townships of Palmers-ton, Clarendon, North Canoto, South Canoto and Miller, in the County of Frontenac, and comprised within an area of about 500 square miles.
George Lake.....	do ....	Tichbourne.....	The inland waters of the Townships of Bedford, Hinchinbroke, Olden and Oso, in the County of Frontenac, and comprised within an area of about 400 square miles.
Samuel Boddy.....	do ....	Athens.....	Upper Beverley Lake, Bass Lake, Little Lake, Wiltse Lake and Mud Lake, in the County of Leeds.
David W. Edgar.....	do ....	Morton.....	Upper Beverley Lake and tributaries to Morton and Lyndhurst and Griffin Lake, in the County of Leeds.
John Moorehead.....	do ....	Long Point.....	From Lyndhurst to the division line, between Leeds and Lansdowne, in the County of Leeds.
James Greer.....	do ....	Warburton.....	Gananoque River from Marble Rock to division line, between the Township of Leeds and Lansdowne, including South Gananoque and Round Lake and Cherry Pound, in the County of Leeds.
Wm. Hicks.....	do ....	Athens.....	The waters of Charleston Lake, in the County of Leeds.
George Jeacle.....	do ....	Westport.....	The waters of Rideau, Upper Rideau, Openicon, Otty, and neighbouring lakes, in the County of Leeds, comprised within an area of about 200 square miles.
John Murphy.....	do ....	Perth.....	The inland waters of the South Riding of the County of Lanark, from the narrows between Upper and Lower Rideau Lakes to Smith's Falls, comprising about 25 miles.

SCHEDULE of Fishery Officers, &c.—*Continued.*PROVINCE OF ONTARIO—*Concluded.*

Name.	Rank.	P. O. Address.	Extent of Jurisdiction.
Eph. Deacon .....	Overseer....	Bolingbroke .....	The waters of River Tay and tributaries and Fall Bay River, in the County of Lanark, comprising about 35 miles.
Alexander Wilson.....	do ....	Carleton Place....	About 60 miles of the waters of Mississippi River and Lake, in the County of Lanark.
R. O. Campbell.....	do ..	Kemptville.....	Rideau River and tributaries, from Ottawa to Burritt's Rapids, including Jock River, in the County of Carleton, comprising 55 miles.
Matthew Riddell....	do ....	Mohr's Corners....	Ottawa River, from the eastern town line boundary of Fitzroy to eastern town line of McNab, including Lake des Chats.
George Russell.....	do ....	Arnprior.....	Ottawa River, extending from the eastern town line boundary of McNab to the western boundary of Horton, having joint jurisdiction over Lake des Chats.
M. L. Russell.....	do ....	Renfrew.....	The waters of Bonnechère River and tributaries, in the County of Renfrew, comprising about 50 miles.
Hugh Gallagher.....	do ....	Sebastapol.....	The inland waters of Townships Sebastapol, Redcliffe, Lyndoch and Gratton, in the County of Renfrew, comprised within an area of about 400 square miles.
Geo. Douglas.....	do ....	Snake River .....	The waters of Muskrat Lake and Snake River, in the County of Renfrew, comprised about 25 miles.
Joseph Bélanger.....	do ....	High Falls. ....	The waters of Calabogie Lake and the island waters, of the Township of Bagot, County of Renfrew, comprised within an area of about 100 square miles.
R. J. N. Pither.....	do ....	Rat Portage .....	Lake of the Woods. (Indian Agent.)
James McCracken .....	do ....	Couchiching.....	Rainy Lake and Lake Seul do
J. McIntyre.....	do ....	Fort William.....	Eagle Lake. do
J. P. Donnelly.....	do ....	Port Arthur....	Nepigon River. do

## PROVINCE OF QUEBEC—TIDAL DIVISION—SOUTH SHORE.

Wm. Wakeham.....	Officers in charge of the Fishery Protection Str. "La Canadienne."	Gaspé Basin .....	Lower St. Lawrence River and Gulf.
J. A. Verge .....	Overseer....	Cross Point.....	The estuary division of the River Restigouche, extending from Point Maguasha to Head of Tide, on the Quebec side, and from Dalhousie to Head of Tide on the New Brunswick side, comprising about 60 miles.
Pierre Cyr.....	do ..	Nouvelle.....	About 35 miles of the waters of Bay Chaleurs, extending along the coast from Maguasha to Grand Caspédia River, including the estuary thereof.
John Smith.....	do ....	New Carlisle.....	About 40 miles of the waters of Bay Chaleurs, extending along the coast from the mouth of Grand Caspédia River to Paspebiac.
John Phelan .....	do ....	Port Daniel. ....	About 30 miles of the waters of Bay Chaleurs, extending along the coast from Paspebiac to Point Macquereau.
Henry Jones.....	do ....	Little River West.	That portion of the waters of the County of Gaspé from corner of the Beach to Point Macquereau, including Bonaventure Island, Little Pabos, Grand Pabos and Grand Rivers.



SCHEDULE of Fishery Officers, &c.—*Continued.*

## PROVINCE OF QUEBEC—TIDAL DIVISIONS—SOUTH SHORE.

Name.	Rank.	P. O. Address.	Extent of Jurisdiction.
Geo. T. Annett.....	Overseer....	Peninsula, Gaspé..	That portion of the waters of the County of Gaspé from Cape Rosier to corner of the Beach, including Dartmouth, York, St. John and Malbaie Rivers.
Ant. Chevrier.....	do .....	Amherst.....	About 100 miles of the waters of the Gulf of St. Lawrence around the Magdalen Islands.
Joseph Lemieux .....	do .....	Montlouis .....	About 80 miles of the waters of the south shore of the River St. Lawrence, fronting on the County of Gaspé, and extending from Cape Rosiers to Montlouis.
Jos. I. Letourneau..	do .....	Ste. Anne des Monts.	About 80 miles of the waters of the south shore of the River St. Lawrence, fronting on the County of Gaspé, and extending from River Ste. Anne des Monts to Cap Chatte.
Johnny Joncas .....	do .....	Matane.....	About 54 miles of the waters of the south shore of the River St. Lawrence, fronting on the County of Rimouski, and extending from Cap Chatte to River Blanche; together with the River Matane, comprising about 12 miles of inland waters.
L. E. Grondin.....	do .....	Rimouski.....	About 45 miles of the waters of the south shore of the River St. Lawrence, fronting on the County of Rimouski, and extending from River Blanche to Rimouski.
H. Martin .....	do .....	do .....	About 35 miles of the waters of the south shore of the River St. Lawrence, fronting on the County of Rimouski, and extending from Rimouski, to the division line between the Counties of Rimouski and Temiscouata.
Nap. Levesque.....	do .....	Isle Verte .....	About 30 miles of the waters of the south shore of the River St. Lawrence, fronting on the County of Temiscouata.
Xavier Pelletier.....	do .....	Ste. Anne de la Pocatière.	About 45 miles of the waters of the south shore of the River St. Lawrence, fronting on the County of Kamouraska.
Eug. Pelletier.....	do .....	St. Roch des Aulnais.	About 70 miles of the waters of the south shore of the River St. Lawrence, fronting on the Counties of L'Islet, Montmagny, Bellechasse and Lévis, extending from Ste. Anne de la Pocatière to Point Lévis.
L. P. Huot.....	do .....	St. Roch de Québec	About 50 miles of the waters of the north and south shores of the River St. Lawrence, around the Island of Orleans.
U. Bhéreur.....	do .....	Malbaie .....	About 60 miles of the waters of the north shore of River St. Lawrence, fronting on the County of Charlevoix, and extending from River du Gouffre to the division line between the Counties of Charlevoix and Saguenay.
L. N. Catellier.....	do .....	Tadoussac.....	About 80 miles of the waters of the north shore of the River St. Lawrence, fronting on the County of Saguenay and extending from the division line between the Counties of Charlevoix and Saguenay to Bersimis; and the tidal waters of the River Saguenay from its mouth to Chicoutimi, comprising 70 miles; in all, 150 miles.
Jos. Boily.....	Warden....	Mille Vaches.....	About 45 miles of the waters of the north shore of the River St. Lawrence, fronting on the County of Saguenay and extending from Escoumains to Bersimis.
N. A. Comeau.....	Overseer....	Godbout.....	About 115 miles of the waters of the north shore of the Gulf of St. Lawrence, fronting on the County of Saguenay and extending from Manicouagan to Baie des Rochers, including the estuaries of Godbout, Trinity and Pentecost Rivers.

SCHEDULE of Fishery Officers, &c.—*Continued.*  
PROVINCE OF QUEBEC—TIDAL DIVISIONS—NORTH SHORE.

Name.	Rank.	P. O. Address.	Extent of Jurisdiction.
T. Mignault.....	Overseer....	Montmagny ....	About 75 miles of the waters of the north shore of the Gulf of St. Lawrence, fronting on the County of Saguenay and extending from Baie des Rochers to Point St. Charles, including the estuaries of Marguerite and Moisie Rivers.
Geo. L. Duguay .....	do .....	Murray Bay .....	About 105 miles of the waters of the north shore of the Gulf of St. Lawrence, fronting on the County of Saguenay and extending from Point St. Charles to Esquimalt Point, including the estuaries of the St. John and Mingan Rivers.
Geo. Gaudin.....	do .....	Natashquan ....	About 100 miles of the waters of the north shore of the Gulf of St. Lawrence, fronting on the County of Saguenay and extending from Esquimalt Point to Natashquan River, including the estuaries of the Rivers Agwanus, Nabissippi and Natashquan.
G. Mathurin.....	do .....	Montmagny .....	About 100 miles of the waters of the north shore of the Gulf of St. Lawrence, fronting on the County of Saguenay and extending from River Natashquan to Cape Whittle, including the estuaries of Washeecoutai, Kegashca, Musquarro and Olomonosheebou Rivers.
Jean Legouvé.....	Warden ....	Pacachoo .....	About 140 miles of the waters of the north shore of the Gulf of St. Lawrence, fronting on the County of Saguenay and extending from Cape Whittle to Checatia.
W. H. Whitely.....	do .....	Bonne Espérance..	About 65 miles of the waters of the north shore of the Gulf of St. Lawrence, fronting on the County of Saguenay and extending from Checatia to Blancs Sablons, the boundary line between Quebec and Newfoundland, on the coast of Labrador, including the estuary of the Esquimalt River.

PROVINCE OF QUEBEC—NON-TIDAL DIVISIONS.

Alf. Blais.....	Overseer....	Causapsal.....	About 30 miles of the waters of Lake and River Metapedia, in the County of Bonaventure, from head of Lake to Causapsal.
George Gagnon.....	Warden ....	St. Hubert....	The inland waters of the County of Temiscouata, comprised within an area of about 2,000 square miles.
Henri Côté.....	do .....	Baie St. Paul....	Lakes in rear of Murray Bay and Bay St. Paul.
Edward Martin.....	do .....	do .....	do .....
Jos. Simard.....	do .....	Ste. Agnès....	do .....
J. F. Picotin.....	do .....	Drummondville..	About 60 miles of the River St. Francis, in the Counties of Yamaska and Drummond, extending from its mouth to Richmond.
N. A. Beach.....	Overseer....	Georgeville.....	The eastern shore of Lake Memphremagog, in the County of Stanstead, and waters extending to the middle of the Lake.
Horace Green.....	do .....	East Bolton .....	The western shore of Lake Memphremagog, in the County of Brome, and waters extending into the Lake.
P. C. Bourke.....	do .....	Somerset.....	The inland waters of the County of Megantic, comprised within an area of 850 square miles.
J. Laberge.....	do .....	Chateauguay .....	About 40 miles of the waters of the River St. Lawrence, fronting on the County of Chateauguay, including Chateauguay River.

SCHEDULE of Fishery Officers, &c.—*Continued.*  
 PROVINCE OF QUEBEC—NON-TIDAL DIVISIONS—*Continued.*

Name.	Rank.	P. O. Address.	Extent of Jurisdiction.
John Kelly.. .. .	Overseer....	Beauharnois .....	About 50 miles of the waters of River St. Lawrence, fronting on the Counties of Beauharnois and Huntingdon; together with about 35 miles of the waters of Chateauguay and Trout Rivers.
J. O. Dion.. .. .	do ....	Chambly Canton..	About 43 miles of the Richelieu River, extending from Sorel to Richelieu Village.
J. B. Chevalier .....	do ...	Iberville .....	About 30 miles of the waters of Richelieu River, extending from St. John's to Lake Champ-lain.
P. E. Luke. .... .	do ..	Philipsburg .....	About 15 miles of the waters of Missisquoi Bay and Pike River, in the County of Missisquoi.
P. W. Nagle.....	do ....	Sherbrooke.....	The inland waters of the County of Stanstead, comprised within an area of about 540 square miles.
Joel Shurtleff.....	do ....	Compton .....	The inland waters of the County of Compton, comprised within an area of about 1,600 square miles.
A. L. Darche.....	do ....	Sherbrooke .....	About 10 miles of the waters of Lake Megantic, in the County of Megantic.
J. B. McDonald .....	do ....	Echo Vale.....	About 10 miles of the waters of Lake Megantic in the County of Megantic.
W. G. Greene.....	do ....	Brome Lake.....	Brome Lake.
John McCaw.....	do ....	Sherbrooke. ....	Lakes in Counties of Megantic and Wolfe.
V. Veilleux.....	Warden ....	St. Ephrem de Tring	The inland waters of the County of Beauce, comprised within an area of about 1,600 square miles.
.....	Overseer....	Three Rivers .....	About 25 miles of the River St. Lawrence and Lake St. Peter, fronting on the County of St. Maurice.
Denis Shooner.....	do ....	Pierreville.....	That portion of Lake St. Peter fronting on the County of Yamaska and the River St. Francis within the limits of the said county.
Geo. Boisvert.....	do ....	Bécancour .....	About 36 miles of the waters of the River St. Lawrence and Lake St. Peter, fronting on the County of Nicolet.
Joseph Charbonneau ..	do ....	St. Césaire.....	Yamaska River and its tributaries from West Farnham to St. Hughes, including Black River.
S. A. Grant.....	do ....	Louiseville.....	About 35 miles of the waters of the River St. Lawrence and Lake St. Peter, fronting on the Counties of Maskinongé and Berthier, including the islands in front.
Jos. Boivin.....	do ....	River Beaudet....	About 20 miles of the waters of the River St. Lawrence, fronting on the County of Soulanges, and extending from Point Beaudet to Coteau Landing.
Narcisse Lavallée.....	Warden ....	Sorel .....	That portion of the waters of the River St. Lawrence fronting on the County of Richelieu, including the islands therein.
John Morris.. .. .	Overseer....	St. Lambert. ....	About 50 miles of the waters of the River St. Lawrence, fronting on the Counties of Laprairie, Chambly and Verchères.
Wm. Ritchie .....	do ...	Chilton .....	Inland waters of the County of Montcalm.
André Robert.....	do ...	Lachine .....	About 15 miles of the waters of the River St. Lawrence, fronting on the County of Jacques Cartier.
Julien Montpetit.. ....	do ...	Isle Perrot.....	About 15 miles of the waters of the River St. Lawrence, surrounding Isle Perrot.
Jos. Lauzon .....	do ...	Terrebonne. ....	The Rivers Jesus and Des Prairies, comprising about 50 miles.



SCHEDULE of Fishery Officers, &c.—*Continued.*  
 PROVINCE OF QUEBEC—NON-TIDAL DIVISIONS—*Concluded.*

Name.	Rank.	P. O. Address.	Extent of Jurisdiction.
Jos. Filiatrault.....	Overseer ...	Ste. Adèle .....	The inland waters of the Townships of Morin and Beresford, in Terrebonne and Wolfe Counties, and de Salaberry and Grandison, in Argenteuil County, comprised within an area of about 500 square miles.
Toussaint Cloutier....	do ...	Piedmont .....	The inland waters of the Townships of Abercrombie, Wexford and Kilkenny, in Terrebonne and Montcalm Counties, comprised within an area of about 300 square miles.
R. W. Jones.....	do ...	St. Andrews.....	About 15 miles of the waters of the north side of the Ottawa River extending from Oka to Carillon.
Theo. Sabourin. ....	do ...	Rigaud.....	About 30 miles of the waters of the south side of the Ottawa River, extending from Cascades to Point Fortune
Pierre St. Pierre.....	do ...	Point Fortune....	About 40 miles of the waters of the Ottawa River, extending from Calumet to Carillon.
Jos. Marion.....	do ...	Hull.....	The waters of the Ottawa River, fronting on the County of Ottawa, comprising about 75 miles.
Erwin Mohr.....	do ...	South Onslow.....	The waters of the Ottawa River, fronting on the County of Pontiac, extending from the division line between the Counties of Ottawa and Pontiac to Fort Coulonge, and comprising about 50 miles.
J. T. Coghlan.....	do ...	Chapeau.....	The waters of the Ottawa River, fronting on the County of Pontiac, extending from Fort Coulonge to Des Joachims, and comprising about 75 miles.
Robt. Joynt .....	Warden ...	Joynt .....	The inland waters of the Township of Masham, in the County of Ottawa, including Bernard Lake, comprised within an area of about 90 square miles.
Emiel Weisener .....	Overseer ...	Blanche .....	The waters of the Townships of Mulgrave and Lathbury, Ottawa County.
R. C. W. McCuaig....	do ...	Ottawa.....	The Inland waters of the Township of Wakefield, Ottawa County.

PROVINCE OF NOVA SCOTIA.

A. C. Bertram. ....	Inspector of Fisheries.	North Sydney....	District No. 1, comprising the Island of Cape Breton.
Robert Hockin....	do	Pictou .....	District No. 2, comprising the Counties of Cumberland, Colchester, Pictou, Antigonish, Guysborough, Halifax and Hants.
J. R. Kinney.....	do	Yarmouth.....	District No. 3, comprising the Counties of Lunenburg, Queen's, Shelburne, Yarmouth, Digby, Annapolis and King's.
		<i>Annapolis County.</i>	
Bailey, W. M.....	Overseer ...	Round Hill.....	The County of Annapolis.
		<i>Antigonish County.</i>	
Aymer, J. R.....	Warden ...	Pomquet Forks, Antigonish .....	From mouth of harbour to Forks; from thence on the Pomquet River to V. Chisholm's Mills, and from Forks, on the Black River, to Falls.
Cameron, Lochlin.....	do ...	Fraser's River, Antigonish.....	From McWilliam's Bridge to head of lake.
Chisholm, Hugh.....	do ...	Lower South River, Antigonish.....	From Antigonish Harbour to McWilliam's, or St. Andrew's Bridge.

SCHEDULE of Fishery Officers, &c.—*Continued.*PROVINCE OF NOVA SCOTIA—*Continued.*

Name.	Rank.	P. O. Address.	Extent of Jurisdiction.
<i>Antigonish County</i> —Concluded.			
Chisholm, Donald.....	Warden....	Salt Springs, Antigonish.....	From Trotter's Mill Brook to W. Thompson's Dam.
Dexter, John.. ...	do .....	Antigonish.....	From Antigonish Harbour (foot of marsh) to Trotter's Mill Brook; thence up said brook to Trotter's Mill, including both branches of West River and Bailey's Brook.
Fraser, Duncan.....	do .....	St. Joseph.....	From Pinkeytown Bridge to Stewart's Mill.
Macadam, Alex.....	do .....	West River.....	From Thompson's Dam to Addington Forks Bridge.
McDonald, John.. ...	Overseer....	Doctor's Brook....	Antigonish County.
McDougall, Arch'd.....	Warden.....	McNair's Cove, Cape George....	From John McDonald (Bun's) Cove, north side of Cape George, to Crebbling Head, St. George's Bay.
Donald, McInnis.. ...	do .....	Addington Forks..	Addington Forks.
Randall, Albert.....	do .....	Bayfield.....	From shore to lake.
<i>Cape Breton County</i>			
Quinan, Francis. ....	Overseer....	Sydney.. ...	Division No. 1.—The sea coast and inland waters of the County of Cape Breton lying north of a line drawn from the south end of Forks Lake to False Bay, extending west as far as a line drawn from the same point on Forks Lake to the head of the North West Arm of Sydney Harbour; including the south side of North West Arm, South Arm, south side of Sydney Harbour to Low Point, and all the coast waters from Low Point to False Bay.
Hickey, Richard.....	do .....	North Sydney....	Division No. 2.—The sea coast and inland waters of the County of Cape Breton lying north and west of a line drawn from the head of the North West Arm of Sydney Harbour to the south end of Forks Lake; thence to Grand Narrows Bridge.
Burke, Wm.....	do .....	Mira Ferry.....	Division No. 3.—The sea coast and inland waters of the County of Cape Breton lying south of a line drawn from the south end of Forks Lake to False Bay, and bounded on the south by a line drawn from the same point on Forks Lake to Marion Bridge, on Mira River; thence to Eagle Head on Gabarous Bay, including that portion of Mira River, east of Marion Bridge; also the waters around Scattarie Island.
McDonald, Alexander...	do .....	East Bay.....	Division No. 4.—The sea coast and inland waters of the County of Cape Breton, south of a line drawn from the south end of Forks Lake to the Grand Narrows Bridge, and bounded on the east by a line drawn from the south end of Forks Lake to Marion Bridge, thence to Eagle Head on Gabarous Bay, including all that portion of Mira River lying south west of Marion Bridge; also Gabarous and Fourcher Bays.
<i>Colchester County.</i>			
Gass, H.....	do .....	Tatamagouche....	Northern Division, County Colchester, comprising Tatamagouche Bay, French and Waugh's Rivers.
Pollock, R. J. ....	Overseer....	Lower Stewiacke..	Stewiacke River (lower portion).

SCHEDULE of the Fishery Officers, &c.—*Continued.*PROVINCE OF NOVA SCOTIA—*Continued.*

Name.	Rank.	P. O. Address.	Extent of Jurisdiction.
<i>Cumberland County.</i>			
Fowler, Elijah.....	Overseer....	Parrsboro' . . . .	Cumberland County, Western Division, including all streams flowing into the Bay of Fundy.
Gilroy, Geo. W.....	do . . . .	Oxford . . . . .	Cumberland County, Eastern Division, embracing all streams emptying into the Straits of Northumberland.
Murphy, Wm.....	do . . . .	Wallace . . . . .	Wallace River.
Wills, A. M . . . .	do . . . .	Pugwash . . . . .	Smelt and oyster fisheries at Pugwash.
<i>Digby County.</i>			
Collins, J. A.....	Overseer....	Westport.....	Western Division of Digby County, comprising the waters of St. Mary's Bay. Long and Brier Islands.
Cosseboom, J. W.. . .	do . . . .	Rossway . . . . .	Eastern Division of Digby County, comprising the waters of Digby County, except those of St. Mary's Bay, and around Long and Brier Islands.
Journey, Robt.....	Warden....	Weymouth . . . .	Sissiboo River.
McKay, Lochlin.....	do . . . .	Barton . . . . .	St. Mary's Bay.
Potter, Chas. T.....	do . . . .	Joggins River....	Joggins River to Bear River.
<i>Guysboro' County.</i>			
Bruce, J. R. . . . .	Warden.....	Guysboro' . . . . .	From mouth Clam Harbour River to Upper Falls.
Cameron, Angus.....	do . . . .	East River.....	East River, St. Mary's.
Cameron, D., sen.....	do . . . .	Upper Caledonia..	West River, St. Mary's, from Wallace's Bridge to head of River.
Cameron, Wm.....	Overseer....	Guysboro' . . . . .	Guysboro' County.
Cross, John.....	Warden . . .	Indian River . . .	Indian River, from mouth to source, District of St. Mary's.
Gunn, Donald . . . .	do . . . .	Cross Roads . . .	From mouth of Scott's Place, to County Harbour Lake, including Gunn's Brook, from Main River to Hurley's Lake.
Henderson, Jas.....	do . . . .	Isaac Harbour....	Isaac Harbour and River.
Hudson, Samuel (Lewis' son).....	do . . . .	Country Harbour..	County Harbour and River, from Bridge at Narrows to Mouth.
Jones, John . . . . .	do . . . .	Mouth of Salmon River.....	Mouth of Salmon River.
Jordan, Wm.....	do . . . .	Glenelg.....	St. Mary's River, extending from Alex. Ross' (above still water) to Hugh Halters', on the West River.
Kenny, Chas . . . . .	do . . . .	Salmon Riv., West Branch, Guysboro'.....	From foot of Neil's Lake to Beaver Dam Lake, inclusive, and all the lakes through which it passes.
Manson, Alex.....	do . . . .	Lochaber Lakes..	St. Mary's River, from Wallace's Lake to Fischer's Mill Dam.
Mattie Frederick . . . .	Warden....	Tracadie, County of Antigonish...	Tracadie River to Counties of Guysboro' and Antigonish.
Munroe, W. M.....	do . . . .	Cole Harbour....	Cole Harbour River.
McKay, Robt.....	do . . . .	Guysborough, Intervale . . . . .	From head of tide to head of Intervale, on the North Branch, and to Cameron's Mill, on the Valley Branch.
McKeen, Thos.....	do . . . .	Melrose . . . . .	From Forks to County Line, including McQueen's Mill and Brook to Lake.
McEllum, Jas . . . . .	do . . . .	Salmon River.....	From Graham's West Line to foot of Neil's Lake, including North Branch and Lake.
McGrath, Adam . . . .	do . . . .	Cross Roads, St. Mary's.....	From junction of Antigonish Branch, St. Mary's River, to the head of Two Mile Lake.



SCHEDULE of Fishery Officers, &c.—*Continued.*PROVINCE OF NOVA SCOTIA—*Continued.*

Name.	Rank.	P. O. Address.	Extent of Jurisdiction.
<i>Guysboro' County</i> —Con.			
McQuarrie, Allan.....	Overseer....	Sherbrooke.....	District of St. Mary.
Pride, Wm.....	Warden....	Sherbrooke, St. Mary's.....	From mouth of St. Mary's River to Sinclair Point, including stream from Wine Harbour to Lake.
Sinclair, Robert.....	do.....	Goshen.....	Eight Island Lake, from Sinclair's Mill to head waters.
Smith, J. L.....	do.....	Cross Roads.....	From Cross Road Bridge, County Harbour River to Eight Island Lake.
Smith, J. P. ....	do.....	West River.....	From H. Hattie's north line to Indianman's Brook, including all tributaries.
Sears, George.....	do.....	Sherbrooke.....	Sherbrooke.
<i>Halifax County.</i>			
Blakely, Jas.....	do.....	Ship Harbour.....	From Ship Harbour to Chezzetcook, inclusive.
Coolen, Chas.....	do.....	Shad Bay.....	Peggy's Cove to Torrence Bay, including Pros- pect and Nine Mile River.
Conrad, Chas.....	do.....	Cole Harbour.....	Cole Harbour.
Crooks, Wesley.....	Overseer....	Peggy's Cove.....	Peggy's Cove.
Fitzgerald, John.....	do.....	Portuguese Cove..	Halifax Harbour to Margaret Bay, Portuguese Cove.
Fraser, John.....	Warden....	Moser's River.....	Moser's River and Ecum Secum and Smith's Brook.
Fraser, O. P.....	do.....	Ecum Secum, Co. Guysboro'.....	Ecum Secum River.
Henry, Chas. G.....	do.....	Upper Musquod- oboit.....	Upper Musquodoboit River.
Hughes, P.....	do.....	Tangier River.....	Tangier River.
Hemlaw, Joshua.....	do.....	Nine Mile River..	Upper Nine Mile River.
Keizer, Geo.....	do.....	Lake Porter.....	Lake Porter and Streams.
.....	Overseer....	Spry Bay.....	Halifax County, from Pope Harbour and Har- bour Island to Ecum Secum.
Mason, Nath.....	Warden....	Head of Margaret's Bay.....	From Hubert's to Peggy's Cove, Margaret Bay, Ingraham and Indian Rivers.
Mosher, Dan.....	do.....	Cow Bay, Dart- mouth.....	Cow Bay Run.
McKiel, Nath.....	do.....	Sheet Harbour..	Sheet Harbour.
McCleam, Donald.....	do.....	Chezzetcook River.	Chezzetcook River.
McLeod, George.....	do.....	Little Musquodo- boit.....	Middle Musquodoboit River.
Rowlings, Geo.....	Overseer....	Musquodoboit Har- bour.....	Halifax County, East Division, Dartmouth to Pope Harbour and Harbour Island.
Shatford, H. A.....	Warden....	Hubbard's Cove..	Hubbard's River.
Stevens, Robt.....	do.....	Musquodoboit Har- bour.....	Musquodoboit River.
Walker, Wm. G.....	Warden....	Little Salmon R., Preston Road...	Little Salmon River.
Whitman, James E.....	do.....	Salmon River.....	Salmon River.
<i>Hants County.</i>			
Burnham, P. S.....	Overseer....	Windsor.....	Hants County, Western Division, from Western County Line to Walton.
Colter, John B.....	do.....	Milford.....	Shubenacadie River.
Horne, Arch.....	Warden....	Enfield.....	South end of Shubenacadie and Nine Mile River.
Mosher, Jas.....	do.....	Brooklyn.....	Rivers Meander and Herbert, from mouth to source.
Mosher, Noah.....	do.....	Mosherville.....	Kennetcook River, from mouth to head of tide.
O'Brien, Jas.....	do.....	Maitland.....	Walton and Kennetcook Rivers.

SCHEDULE of Fishery Officers, &c.—*Continued.*PROVINCE OF NOVA SCOTIA—*Continued.*

Name.	Rank.	P. O. Address.	Extent of Jurisdiction.
<i>Hants County.</i> Con.			
Smith, W. B. ....	Overseer ....	Maitland.. ....	Shubenacadie River from Five Mile River to its mouth and the south side of Cobequid Bay to Noel.
Snide, John ....	do ....	Shubenacadie....	Shubenacadie River from Shubenacadie to and including Five Mile River.
<i>Inverness County.</i>			
McLean, D. F. ....	do ....	Port Hood.....	Division No. 1.—The sea coast of the County of Inverness south of Mabou Harbour, including South-West Mabou and Little Mabou Rivers, Port Hood, Seaside, Judique, Little Judique, Long Point, Creg-nish, Low Point, Port Hastings and Port Hawkesbury, and extending into the interior to the north-west arm of River Inhabitants; also all that portion of the inland waters of the County of Inverness lying on the northern side of the County Victoria line from James McKinnon's to Whycocomagh Bay, and from the western side of the road leading from Whycocomagh Bay through Glencoe and south-west ridge of Mabou to Mabou Bridge.
McEachern, Peter ....	do ....	Glendale .....	Division No. 2.—That portion of the County of Inverness lying on the southern side of the County Victoria line, from the head of Whycocomagh Bay (Port Hawkesbury and Port Hastings excepted), including River Inhabitants and its branches, River Denis and its branches, Malagawatch and West Bay.
McLean, Lewis .....	do ....	Mabou. ....	Division No. 3.—That portion of the County of Inverness lying on the northerly side of Mabou Harbour, including the main river of the same name north of Whycocomagh and all streams flowing into the northern side of Whycocomagh Bay; also the northern side of Mabou mouth, Coal Mines; Mabou Light Point, Port Ban, Broad Cove shore to Broad Cove Chapel on the sea coast and the waters of Lake Ainslie in the interior.
Coady, James .....	do ...	S. W. Margaree ..	Division No. 4.—That portion of the sea coast of the County of Inverness extending from Broad Cove Chapel, including Broad Cove Marsh, Chimney Corner, Margaree Island and Doucette's Cove to Delaney's Cove; also the waters of East Lake Ainslie, and the streams flowing into it, Loch Ban, S. W. Margaree River and its tributaries, and the main river of Margaree from the Forks to Margaree Harbour.
Ross, David .....	do ....	N. E. Margaree...	Division No. 5.—That portion of the sea coast of the County of Inverness extending from Delaney's Cove northward, including Big Pond, Cheticamp Point, Eastern Harbour, Little River, Cape Rouge and Pleasant Bay to Meat Cove; also that portion of the north-east Margaree River from Margaree Forks to the source of Big Intervale, and all other streams to the County Victoria line.

SCHEDULE of Fishery Overseers, &c.—*Continued.*PROVINCE OF NOVA SCOTIA—*Continued.*

Name.	Rank.	P. O. Address.	Extent of Jurisdiction.
<i>King's County.</i>			
Bishop, C. E. ....	Warden ....	Horton .....	Gaspereaux River.
Brown, Philip .....	do .....	Blomidon .....	Blomidon.
Miller, Jas. S. ....	Overseer .....	Canning .....	King's County.
Murphy, L. A. ....	Warden .....	Gaspereaux .....	Gaspereaux River.
McIntyre, W. ....	do .....	Aylesford .....	Annapolis River.
Reid, R. F. ....	Overseer .....	Wolfville .....	King's County.
Thorpe, J. W. ....	Warden .....	Hall's Harbour ..	Hill's Point to Cape Split.
<i>Lunenburg County.</i>			
Boylan, Edward .....	Warden ....	New Ross .....	Upper Gold River.
Burns, Amon .....	do .....	Upper La Have ..	From Cooks to source of La Have River.
Cooney, Wilbur .....	do .....	Chester .....	East Branch, Middle River.
Croft, Wm. ....	do .....	Chester Basin ....	East Gold River, from Bongard's Point to Gold River Branch, thence to Clarke's, Clinton's and Henry's Lakes.
Demon, David .....	do .....	Lower Gold River.	Lower Gold River.
Evans, David .....	Overseer .....	Chester .....	Lunenburg County, East Division, Middle Gold, Martin's and Mushamush Rivers.
Godard, C. E. ....	do .....	Bridgewater .....	La Have River.
Keating, Michael .....	Warden .....	East River .....	East River.
Keddy, J. H. ....	do .....	New Ross .....	Larder's River.
Mossman, Josiah .....	do .....	Lunenburg .....	From Henry Kock's to Knock's.
Meisner, Jacob .....	do .....	Chester .....	East River.
Schmeisser, N. ....	do .....	East LaHaveFerry	La Have River, from mouth to Wilkie's Cove.
Solomon, W. M. ....	Overseer .....	Lunenburg .....	Western Division, Lunenburg County.
<i>Pictou County.</i>			
McPhie, Allan .....	do .....	Avondale .....	Eastern division, comprising the coast waters from Pictou Harbour to Antigonish County line, including French River, Barney's River, Bailey's Brook and streams tributary thereto.
McQueen, J. D. ....	do .....	Little Harbour ..	Southern Division, comprising Sutherland's River, Moose River, Garden of Eden Lake, East River, St. Mary's and stream tributary thereto.
Pritchard, A. O. ....	do .....	New Glasgow .....	Central Division, comprising Pictou Harbour, Pictou Island, East, West and Middle Rivers of Pictou.
Sutherland, Robert. ....	do .....	River John. ....	Western Division, comprising the coast waters from Colchester County line to Cole's Reef at Pictou Harbour, and all waters flowing into these waters, viz.: River John and tributaries Toney River, Big Cariboo and Little Cariboo Rivers.
<i>Queen's County.</i>			
Day, Thos. ....	do .....	Liverpool .....	Queen's County.
Fitzgerald, John .....	do .....	Mill Village .....	From Steam Mills to Salter's Falls on Port Medway River.
Ford, Theo. ....	Warden .....	Milton .....	Milton Bridge up to Port Liverpool River.
Foster, I. C. ....	do .....	Port Medway .....	Puddington Island to Toby's Island.
Freeman, David .....	Overseer .....	Kempt .....	The head waters of Liverpool and Medway Rivers, including Lake Rossignol, Maloga, Seguin, Sega and other lakes.
Miles, Barnabas .....	Warden .....	Greenfield .....	Salter's Falls to Pawn Hook on Port Medway River.



SCHEDULE of Fishery Officers, &c.—*Continued.*PROVINCE OF NOVA SCOTIA—*Concluded.*

Name.	Rank.	P. O. Address.	Extent of Jurisdiction.
<i>Richmond County.</i>			
Lenoir, Alfred.....	Overseer...	Arichat.....	Division No. 1. The sea coast and island waters of Isle Madame, including the southerly half of the waters of Lennox Passage.
Cameron, Duncan.....	do ....	St. Peters.....	Division No. 2. That portion of the inland waters of the County Richmond lying west of St. Peter's Canal, including the northerly half of the waters of Lennox Passage.
Murchison, John.. ....	do ....	Grand River.....	Division No. 3. That portion of the sea coast, lakes and inland waters lying east of St. Peter's Canal.
<i>Shelburne County.</i>			
Acker, Timothy.....	Warden...	Birchtown.....	Birchtown River.
Crowell, P. ....	do ..	Barrington.. .	Barrington River.
Goudy, E. S. ....	Overseer...	Barrington.. .	Clyde River to Yarmouth County line.
Holden, C. A. ....	Warden...	Jordan River.....	Ogden's Brook and Indian River.
McGill, W. Jno.....	Overseer...	Shelburne .....	Shelburne County.
McKinney, Lewis. ....	Warden...	Round Bay.....	Round Bay River.
McLean, Wm. ....	do ....	Port Saxon.. .	Port Saxon.
Nichol, F. G. ....	do ....	Clyde River .....	Clyde River.
Ryer, George.....	do ....	Shelburne .....	Roseway River.
<i>Victoria County.</i>			
McDonald, Duncan....	Overseer...	Aspy Bay.....	Division No. 1—The sea coast and inland waters of the County of Victoria, lying north of a line drawn from Middle Head, which divides the north and south bays of Ingonish, to the County line of Inverness.
Bingham, Wm .....	do ....	Englishtown.....	Division No. 2—The sea coast and inland waters of the County of Victoria from the Cape Breton County line, on Boularderie Island, to Lake O'Law Post Office, near Inverness County line, thence to the boundary of Division No. 1, at Middle Head Ingonish, including the waters of Clyburn Brook.
McQuarrie, Donald.....	do ...	Middle River.....	Division No. 3—That portion of the county including Bras d'Or Lake, with the inland waters and estuaries, from a line drawn from the angle in the County line of Cape Breton at Boularderie Island, to Lake O'Law Post Office.
<i>Yarmouth County.</i>			
Hatfield, J. A.....	do ....	Tusket .....	Yarmouth County.

## PROVINCE OF NEW BRUNSWICK.

Pratt, J. H.....	Inspector of Fisheries and officer in comm'd of Cruiser "Dream."	St. Andrew's.....	District No. 1, comprising the County of Charlotte, including the Islands of Campobello and Grand Manan, and Passamaquoddy Bay.
Chapman, Robert A....	Inspector of Fisheries.	Moncton.....	District No. 2, comprising the Counties of Restigouche, Gloucester, Northumberland, Kent and Westmoreland.
Morrow, David.....	do ..	Oromocto.....	District No. 3, comprising the Counties of Albert, St. John, King's, Queen's, Sunbury, York, Carleton and Victoria.

SCHEDULE of Fishery Officers, &c.—*Continued.*PROVINCE OF NEW BRUNSWICK—*Continued.*

Name.	Rank.	P. O. Address.	Extent of Jurisdiction.
<i>Albert County.</i>			
Dryden, J. W .....	Warden ....	Hillsboro' .....	Mouth of Petitcodiac River and Dorchester Bay.
Oliver, Bartlet .....	do .....	Harvey, Little Ro- cher .....	Rocher Bay.
Stewart, Suthd. ....	Overseer ....	Alma .....	County of Albert.
Taylor, Wallace. ....	Warden ....	Coverdale. ....	Petitcodiac River.
Wilbur, Kinnear T. ....	do .....	Midway, Harvey. .	Germantown Lake and Shepody River.
<i>Carleton County.</i>			
Burt, George R. ....	Overseer ....	Upper Woodstock.	St. John River and tributaries, from Long's Creek to Tobique River.
Lindsay, G. Alex .....	do .....	Highlands. ....	Miramichi River (S.W.) from head waters to forks.
Scott, J. W. ....	Warden ....	Canterbury. ....	St. John River, from Eel River to Woodstock.
<i>Charlotte County.</i>			
Ash, William .....	Overseer ....	Beaver Harbour. .	East District of County Charlotte.
Barry, Thomas. ....	Warden ....	Lower Falls, Ma- gaguadavic. ....	Lower Falls, Magaguadavic River.
Brown, Barth. ....	Overseer ....	Campobello. ....	Campobello and West Isles, with coasts and streams in Charlotte County.
Campbell, D. F. ....	do .....	St. Andrews .....	Inner Bay of Passamaquoddy.
Carroll, Edward .....	Warden ....	Grand Manan. ....	Whitehead Island.
Dick, Samuel .....	do .....	La Tête .....	Inner Bay, Passamaquoddy.
Dixon, Robert .....	do .....	Lepreaux. ....	Seeley's Cove to Lepreaux.
Holmes, Thomas. ....	do .....	Deer Island. ....	West side, Deer Island.
Lord, J. M. ....	Overseer ....	do .....	Deer Island.
McLaughlin, W. B. ....	do .....	Grand Manan. ....	Grand Manan Island and spawning grounds.
Todd, Frank. ....	do .....	St. Stephen. ....	St. Croix River and tributaries.
<i>Gloucester County.</i>			
Aché, Adolphe .....	Warden ....	Shippegan. ....	Shippegan.
Albert, Xavier D. ....	Overseer ....	Caraquet. ....	Caraquet Herring Banks.
Boyd, Alex .....	do .....	Miscou Harbour. .	Little Shippegan to Miscou.
Brown, Gavin. ....	Warden ....	Tête à Gauche Riv'r	From Brown's Mill down to mouth.
Calnan, John, jun. ....	do .....	Kinsale. ....	That part of River Tête à Gauche, from Brown's Mills to source.
Comeau, Frédéric. ....	do .....	Petit Rocher. ....	Petit Rocher, from Belledune to Mill Stream.
Dempsey, Miles. ....	do .....	Salmon Beach. ....	Salmon Beach, from Bass River to Grindstone Point.
Delegard, John .....	do .....	Shippegan. ....	Shippegan.
Gibbs, Valentine. ....	do .....	Pokemouche .....	Pokemouche.
Hache, J. L. ....	Overseer ....	Caraquet. ....	Caraquet and Shippegan oyster beds with St. Cimon's Inlet and River.
Hickson, James. ....	do .....	Bathurst. ....	River Nepissiguit and tributaries, with sea coast and streams, from Belledune River to Grind- stone Point.
Robichaud, Olivier. ....	Warden ....	Ferguson's Point. .	Coast from Northumberland County line to Green Point, with Big and Little Tracadie Rivers.
Thériault, James D. ....	Overseer ....	Grande Anse. ....	Bay Chaleurs, from Grande Anse to Point Miz- zenette.
Walsh, William. ....	do .....	Pokemouche. ....	District of Pokemouche.
Whelton, Michael. ....	Warden ....	do .....	Pokeshaw.
<i>Kent County.</i>			
Boudreau, Ed. ....	do .....	Little Buctouche River. ....	Little Buctouche River.
Collet, S. L. ....	do .....	Buctouche. ....	Buctouche Bay.
Cornier, Charles. ....	Overseer ....	Cocagne. ....	Coast line and inland waters of the Parish of Dundas.

SCHEDULE of Fishery Officers, &c.—*Continued.*  
 PROVINCE OF NEW BRUNSWICK—*Continued.*

Name.	Rank.	P. O. Address.	Extent of Jurisdiction.
<i>Kent County— Concluded.</i>			
Girouard, M. A. ....	Overseer. ....	Buctouche. ....	Coast line and inland waters of the Parishes of Wellington and St. Mary's.
Hannah, William F. ....	do ....	Richibucto. ....	Coast line and inland waters of the Parishes of Richibucto and Weldford.
Leblanc, A. T. ....	do ....	Legerville. ....	Coast line and inland waters of the Parishes of Harcourt and Huskisson.
Mauzerolles, James. ....	Warden. ....	Kouchibouquacis ..	Coast line of Kouchibougnac Bay extending from Kouchibouquacis River to Pt. Sapin.
Richard, Pierre L. ....	Overseer. ....	St. Louis. ....	Coast line and inland waters of the Parishes of St. Louis, Carleton and Acadieville.
<i>King's County.</i>			
Belyea, J. A. ....	Overseer. ....	Westfield. ....	St. John River and Belle Isle Bay and streams running therinto.
Fenwick, Edwin. ....	Warden ....	Studholm. ....	Millstream.
Gosline, Samuel. ....	Overseer ....	Smith's Creek. ....	From mouth of Smith's Creek, upwards.
Pearson, I. R. ....	Warden ....	English Settlement	Washademoak Lake and its tributaries in King's and Queen's Counties.
Spragg, Z. S. ....	do ....	Belle Isle. ....	Belle Isle Bay.
<i>Northumberland County.</i>			
Robichaud, Prudent. ....	Overseer. ....	Upper Neguac. ....	District No. 1—The north coast of Northumberland County extending from Gloucester County line up the Miramichi Bay and River to Oak Point as far as midchannel, including all bays, gullies, islands, rivers and streams entering therinto.
Williston, J. G. ....	do ....	Bay du Vin. ....	District No. 2—The south coast of Northumberland County, extending from Kent County line up the Miramichi Bay and River to Point aux Carr as far as midchannel, including all bays, gullies and islands and rivers and streams entering therinto.
Abbott, Lemuel. ....	do ....	Chatham. ....	District No. 3—Both shores of the main Miramichi River extending from a line drawn from Point aux Carr on the south side to Oak Point on the north side, to its junction with the north-west and south-west Miramichi Rivers, together with all islands therein and all rivers and streams emptying therinto.
Hogan, Patrick. ....	do ....	Newcastle. ....	District No. 4—The north-west branch of the Miramichi River, with all its tributaries, extending from its junction with the Main River to its sources.
Parker, Thomas. ....	do ....	Derby. ....	District No. 5—The south-west branch of the Miramichi River, with all its tributaries, extending from its junction with the Main River to its sources.
<i>Queen's County.</i>			
Hetherington, I. T. ....	Overseer. ....	Jenkins, Johnson..	From Cole's Island to foot of Washademoak Lake
Langan, Isaiah. ....	Warden ....	Chipman, Gaspe- reaux ....	Salmon River.
Philips, Robert. ....	do ....	Canaan Rapids ..	Head waters, Washademoak Lake.
<i>Restigouche County.</i>			
McPherson, Alex. ....	Overseer. ....	River Charlo. ....	From Belledune to Dalhousie.



SCHEDULE of Fishery Officers, &c.—*Continued.*PROVINCE OF NEW BRUNSWICK—*Concluded.*

Name.	Rank.	P. O. Address.	Extent of Jurisdiction.
		<i>Sunbury County.</i>	
Griffith, Chas. ....	Warden ....	Sheffield .....	St. John River, Indiantown to County Line of York.
Hoben, G. W. ....	Overseer ....	Burton .....	do do do
		<i>St. John County.</i>	
Cochrane, John .....	Overseer ....	I.C.R. Station, St. John .....	City of St. John and vicinity with special reference to the detection and seizure of illegally caught fish shipped by railway.
O'Brien, Jos. ....	do ....	Carleton, St. John.	St. John County.
Rourke, E. V. ....	do ....	St. Martin's .....	Eastern part of St. John County, from Quaco Head to Goose River.
		<i>Victoria County.</i>	
Ryan, Thos. D. ....	Overseer ....	Grand Falls .....	County of Victoria.
		<i>Westmoreland County.</i>	
Cormier, D. T. ....	do ....	Pré d'en haut .....	Dorchester Bay.
Deacon, W. B. ....	do ....	Shediac .....	Shediac Harbour and River.
Goodwin, Robt. ....	do ....	Bay Verte .....	The Parishes of Sackville and Westmoreland.
		<i>York County.</i>	
Orr, Robt. ....	do ....	Fredericton .....	County of York.

## PROVINCE OF PRINCE EDWARD ISLAND.

Edward Hackett .....	Inspector of Fisheries.	Tignish .....	Prince Edward Island.
Patrick McBride ...	Overseer ....	Central Bedeque..	Lot 26.—The County of Prince.

## PROVINCE OF MANITOBA.

McQueen, Alex. ....	Inspector...	Winnipeg .....	Province of Manitoba. Also the direct superintendence of District No. 3.
.....	.....	.....	1. Souris District—Bounded on the north by the 50th parallel of latitude from the western boundary of the province easterly to the 99th meridian line; on the east by the 99th meridian line from the 50th parallel southerly to the international boundary; on the south by the international boundary line to the western boundary of the province, and on the west by the western boundary of the province from the international boundary northerly to the 50th parallel north latitude.
.....	.....	.....	2. Portage la Prairie District—Bounded on the north by the 50th parallel of latitude from the 99th meridian line, easterly to the first principal meridian line; on the east by the first principal meridian line from the 50th parallel, southerly to the international boundary line from the first principal meridian line, westerly to the 99th meridian line; and on the west by the 99th meridian line from the international boundary line to the 50th parallel of latitude.

SCHEDULE of Fishery Officers, &c.—*Continued.*PROVINCE OF MANITOBA—*Continued.*

Name.	Rank.	P. O. Address.	Extent of Jurisdiction.
McQueen, Alex. ....	Inspector...	Winnipeg .....	3. Provencher District—Bounded on the north by the 50th parallel of latitude from the first principal meridian to the easterly boundary of the province; on the east by the eastern boundary of the province from the 50th parallel of latitude, southerly to the international boundary; on the south by the international boundary line from the eastern boundary of the province, westerly to the first principal meridian; and on the west by the first principal meridian from the international boundary, northerly to the 50th parallel of latitude.
.....	.....	.....	4. First Lake Winnipeg District—Bounded on the north by the 51st parallel of latitude from the first principal meridian, easterly to the eastern boundary of the province; on the east by the eastern boundary of the province from the 51st parallel of latitude, southerly to the 50th parallel of latitude; on the south by the 50th parallel of latitude from the eastern boundary of the province, westerly to the first principal meridian; and on the west by the first principal meridian from the 50th parallel of latitude, northerly to the 51st parallel.
.....	.....	.....	5. Lower Lake Manitoba District—Bounded on the north by the 51st parallel of latitude from the 99th meridian, easterly to the first principal meridian; on the east by the first principal meridian line from the 51st parallel of latitude, southerly to the 50th parallel; on the south by the 50th parallel of latitude from the first principal meridian, westerly to the 99th meridian line; and on the west by the 99th meridian line from the 50th parallel of latitude, northerly to the 51st parallel.
Muckle, J. A. ....	Overseer....	Birtle .....	6. Little Saskatchewan District—Bounded on the north by the 51st parallel of latitude from the western boundary of the province, easterly to the 99th meridian line; on the east by the 99th meridian line from the 51st parallel of latitude, southerly to the 50th parallel; on the south by the 50th parallel of latitude from the 99th meridian line, westerly to the western boundary; and on the west by the western boundary of the province from the 50th parallel of latitude, northerly to the 51st parallel.
.....	.....	.....	7. Lake Dauphin District—Bounded on the north by the 52nd parallel of latitude from the western boundary of the province, easterly to the 99th meridian line; on the east by the 99th meridian line from the 52nd parallel of latitude, southerly to the 51st parallel; on the south by the 51st parallel of latitude from the 99th meridian line, westerly to the western boundary of the province; and on the west by the western boundary of the province from the 51st parallel of latitude, northerly to the 52nd parallel.

SCHEDULE of Fishery Officers, &c.—*Continued.*PROVINCE OF MANITOBA—*Continued.*

Name.	Rank.	P. O. Address.	Extent of Jurisdiction.
Martineau, H. ....	Overseer ...	Manitoba House...	8. Upper Lake Manitoba District—Bounded on the north by the 52nd parallel of latitude from the 99th meridian line, easterly to the first principal meridian; on the east by the first principal meridian line from the 52nd parallel of latitude, southerly to the 51st parallel; on the south by the 51st parallel of latitude from the first principal meridian to the 99th meridian line; and on the north by the 52nd parallel of latitude from the 99th meridian line, easterly to the first principal meridian.
.....			9. Second Lake Winnipeg District—Bounded on the north by the 52nd parallel of latitude from the first principal meridian, easterly to the eastern boundary of the province; on the east by the eastern boundary of the province from the 52nd parallel of latitude, southerly to the 51st parallel; on the south by the 51st parallel of latitude from the eastern boundary of the province westerly to the first principal meridian, and on the west by the first principal meridian from the 51st parallel of latitude southerly to the 52nd parallel.
.....			10. Third Lake Winnipeg District—Bounded on the north by the northern boundary of the province from the 99th meridian line, easterly to the eastern boundary of the province; on the east by the eastern boundary of the province from the northern boundary of Manitoba, southerly to the 52nd parallel of latitude; on the south by the 52nd parallel of latitude from the eastern boundary of the province, westerly to the 99th meridian line, and on the west by the 99th meridian line from the 52nd parallel of latitude, northerly to the northern boundary of the province.
.....			11. Lake Winnipegosis District—Bounded on north by the northern boundary of the province from the westerly boundary thereof, easterly to the 99th meridian line; on the east by the 99th meridian line from the northern boundary of the province southerly to the 52nd parallel of latitude; on the south by the 52nd parallel of latitude from the 99th meridian line, westerly to the western boundary of the province from the 52nd parallel of latitude, northerly to the northern boundary of Manitoba.
.....			12. Grand Rapids District—Bounded on the north by the 54th parallel of latitude from a line in continuation of the western boundary of Manitoba, easterly to the 99th meridian line, on the east of the 99th meridian line from the 54th parallel of latitude, southerly to the north boundary of Manitoba; on the south by the northern boundary of the province from the 99th meridian line, westerly to the western boundary of Manitoba, and on the west by a line in continuation of the western boundary of the province, northerly to the 54th parallel of latitude.



SCHEDULE Fishery Officers, &c.—*Continued.*PROVINCE OF MANITOBA—*Concluded.*

Name.	Rank.	P. O. Address.	Extent of Jurisdiction.
.....	.....	.....	13. Fourth Lake Winnipeg District—Bounded on the north by the 54th parallel of latitude from the 99th meridian line, easterly to the 95th meridian line; on the east by the 95th meridian line from the 54th parallel of latitude, southerly to the northern boundary of Manitoba; on the south by the northern boundary of Manitoba from the 95th meridian line, westerly to the 99th meridian line; on the west by the 99th meridian line from the northern boundary of Manitoba northerly to the 54th parallel of latitude.
Gunne, Robt .....	Guardian...	Winnipeg...	} Each within the limits of his district as a forest ranger. Within his district as crown timber agent.
Toole, Wm. ....	do .....	do .....	
Fee, Michael. ....	do .....	do .....	
Stevenson, E. F. ....	do .....	do .....	

## NORTH-WEST TERRITORIES.

Gilchrist, F. C. ....	Inspector ...	Fort Qu'Appelle..	The North-West Territories.
Foster, John .....	Overseer .....	Silton .....	Long Lake, N.W.T.
Lucas, S. B. ....	do .....	Holbrooke .....	District of Peace Hills.
McKenzie, R. S. ....	do .....	Stobart. ....	do Prince Albert.
Johnston, A. E. ....	do .....	Edmonton .....	} Fishery divisions comprise the limits of each officer's district as a forest ranger.
Thompson, J. R. ....	do .....	Calgary. ....	
Cook, R. S. ....	do .....	Prince Albert....	
Aikman, T. H. ....	do .....	{ Care of the Commissioner of Dominion Lands, Winnipeg.....	
Rogers, John .....	do .....		} Fishery divisions comprise the limits of each officer's district as a homestead inspector in Manitoba and the North-West Territories.
Park, R. S. ....	do .....		
Arsenault, J. J. ....	do .....		
Allison, John .....	do .....		
Allison, W. H. ....	do .....		
De Balinhard, W. C. ....	do .....		

## PROVINCE OF BRITISH COLUMBIA.

McNab, John .....	Inspector...	New Westminster.	Province of British Columbia.
McKay, J. W. ....	Overseer...	Kamloops .....	District of Yale.
Meason, W. C. ....	do .....	William's Lake...	The limit of his district as Indian agent.
Phillips, Michael .....	do .....	Kootenay .....	do do do
Higginson, T. S. ....	do .....	New Westminster.	do do Crown timber agent.

SCHEDULE of Fishery Officers, &c.—*Concluded.*

## FISH CULTURE.

Name.	Rank.	P. O. Address.
Samuel Wilmot.....	Superintendent of Fish Culture for the Dominion.....	Ottawa.
Charles Wilmot.....	Officer in charge of Government Fish Hatchery.....	Newcastle, Ont.
William Parker.....	do	Sandwich, Ont.
L. N. Catellier.....	do	Tadousac, Que.
Henry Davis.....	do	Gaspé Basin, Que.
Alex. Mowat.....	do	Campbellton, N.B.
A. H. Moore.....	do	Magog, Que.
A. B. Wilmot.....	do	Bedford Basin, N.S.
C. A. Farquharson.....	do	Sydney, C.B., N.S.
Isaac Sheasgreen.....	do	South Esk, N.B.
Charles McCluskey.....	do	Grand Falls, N.B.
John McNab.....	do	New Westminster, B.C.
A. Ogden.....	do Government Lobster Hatchery...	Bay View, Pictou, N.S.

## RECAPITULATION.

Provinces.	No. of Officers.
Ontario.....	101
Quebec.....	71
Nova Scotia.....	134
New Brunswick.....	69
Prince Edward Island.....	2
Manitoba and North-West Territories.....	34
British Columbia.....	5
Fish Culture.....	13
Officers and crews of seven fisheries protection vessels.....	166
Total.....	595

In addition to the above regular staff, 204 temporary local Guardians were employed during the year as occasion required. Forty-one of these guardians being in Prince Edward Island.

## APPENDIX No. 2.

# FISHING BOUNTIES.

GENERAL STATEMENT of Fishing Bounty Claims received for the Year 1890.

Province.	County.	No. of Claims received.	No. of Claims rejected.	No. of Claims held in abeyance.	No. of Claims paid.
Nova Scotia . . . . .	Annapolis . . . . .	145	3		142
	Antigonish . . . . .	136			136
	Cape Breton . . . . .	553	3		557*
	Digby . . . . .	311	12		300*
	Guysboro' . . . . .	1,242	8		1,234
	Halifax . . . . .	1,738	15		1,727*
	Inverness . . . . .	662	1		661
	Kings . . . . .	65	1		64
	Lunenburg . . . . .	1,082	8		1,074
	Pictou . . . . .	24	1		23
	Queen's . . . . .	305	1		304
	Richmond . . . . .	1,209	24	1	1,362*
	Shelburne . . . . .	824	1		823
	Victoria . . . . .	816	15		801
	Yarmouth . . . . .	225	5		221*
	Totals . . . . .	9,357	98	1	9,429
New Brunswick . . . . .	Charlotte . . . . .	837	10		827
	Gloucester . . . . .	1,320	51		1,282*
	Kent . . . . .	299	2		297
	Northumberland . . . . .	14			14
	Restigouche . . . . .	1	1		
	St. John . . . . .	47	2		45
	Westmoreland . . . . .	4			4
	Totals . . . . .	2,522	66		2,469
Prince Edward Island . . . . .	King's . . . . .	710	26	1	683
	Prince . . . . .	494	65		429
	Queen's . . . . .	148	3		145
	Totals . . . . .	1,352	94	1	1,257
Quebec . . . . .	Bonaventure . . . . .	1,824	12		1,812
	Gaspé . . . . .	2,432	36		2,396
	Rimouski . . . . .	28	1		27
	Saguenay . . . . .	576	10		569*
	Totals . . . . .	4,860	59		4,804

### RECAPITULATION.

Nova Scotia . . . . .	9,337	98	1	9,429
New Brunswick . . . . .	2,522	66		2,469
Prince Edward Island . . . . .	1,352	94	1	1,257
Quebec . . . . .	4,860	59		4,804
	18,071	317	2	17,959

\* NOTE—The number of Bounty Claims paid for 1890 includes several applications for the years 1888 and 1889 held in abeyance for enquiry. This will explain the difference between claims paid and claims received after deducting those rejected and held in abeyance.



**GENERAL STATEMENT of Payments made on account of Fishing Bounty Claims to  
Boats and Vessels, for the year 1890.**

Province.	County.	Amount Paid.	Total.
		\$ cts.	\$ cts.
Nova Scotia.....	Annapolis.....	1,033 58	
	Antigonish.....	895 75	
	Cape Breton.....	4,351 19	
	Digby.....	3,108 05	
	Guysboro'.....	8,849 44	
	Halifax.....	13,218 57	
	Inverness.....	5,826 67	
	King's.....	508 38	
	Lunenburg.....	20,563 09	
	Pictou.....	146 00	
	Queen's.....	2,767 00	
	Richmond.....	10,971 30	
	Shelburne.....	7,767 27	
	Victoria.....	5,477 00	
	Yarmouth.....	5,776 35	91,259 64
New Brunswick.....	Charlotte.....	6,322 07	
	Gloucester.....	11,623 15	
	Kent.....	2,312 35	
	Northumberland.....	293 26	
	St. John.....	523 50	
	Westmoreland.....	37 00	21,111 33
Prince Edward Island...	King's.....	5,550 09	
	Prince.....	4,574 93	
	Queen's.....	1,561 30	11,686 32
Quebec.....	Bonaventure.....	11,945 76	
	Gaspé.....	17,290 51	
	Rimouski.....	145 00	
	Saguenay.....	4,829 45	34,210 72
	LESS—Refunds, N.S. Boats, \$24; N.B. Boats, \$3.		158,268 01
	Grand Total.....		27 00
			158,241 01

DETAILED STATEMENT showing Fishing Bounties paid to Vessels in each County,  
for the Year 1890.

Province.	County.	Number of Vessels.	Tonnage.	Average Ton- nage.	No. of Men.	Amount Paid.
						\$ cts.
Nova Scotia.....	Annapolis.....	6	176	29	28	234 58
	Antigonish.....	1	11	11	2	13 75
	Cape Breton.....	17	320	19	66	455 19
	Digby.....	42	965	23	280	1,381 05
	Guysboro'.....	14	371	26	69	500 44
	Halifax.....	101	2,716	27	601	3,950 57
	Inverness.....	16	523	33	113	732 67
	King's.....	6	101	17	12	147 38
	Lunenburg.....	149	10,716	72	1,864	15,957 09
	Queen's.....	12	628	52	129	942 00
	Richmond.....	68	2,038	30	487	2,963 30
	Shelburne.....	52	2,132	41	500	3,087 27
	Yarmouth.....	56	3,258	58	784	4,771 35
	Totals.....	540	23,955	44	4,935	35,136 64
New Brunswick.....	Charlotte.....	71	1,176	17	222	1,678 07
	Gloucester.....	41	551	13	141	812 15
	Kent.....	3	51	17	9	76 50
	Northumberland.....	6	168	28	31	216 26
	St. John.....	12	183	15	44	274 50
	Totals.....	133	2,129	16	447	3,057 48
Prince Edward Island ...	King's.....	15	506	34	102	713 09
	Prince.....	14	447	32	87	633 93
	Queen's.....	3	49	16	14	63 30
	Totals.....	32	1,002	31	203	1,410 32
Quebec .....	Bonaventure.....	2	37	18	6	51 76
	Gaspé.....	7	277	40	59	376 51
	Saguenay.....	25	868	35	155	1,287 45
	Totals.....	34	1,182	35	220	1,715 72

RECAPITULATION.

Nova Scotia .....	540	23,955	44	4,935	35,136 64
New Brunswick.....	133	2,129	16	447	3,057 48
Prince Edward Island.....	32	1,002	31	203	1,410 32
Quebec .....	34	1,182	35	220	1,715 72
Grand totals.....	739	28,268	38	5,805	41,320 16

## DETAILED STATEMENT of Fishing Bounties paid to Boats for the Year 1890.

Province.	County.	Number of Boats.	Number of Men.	Amount Paid.
				\$ cts.
Nova Scotia .....	Annapolis.....	136	221	799 00
	Antigonish.....	135	249	882 00
	Cape Breton.....	540	1,119	3,896 00
	Digby.....	258	490	1,727 00
	Guysboro'.....	1,219	2,378	8,349 00
	Halifax.....	1,624	2,548	9,268 00
	Inverness.....	645	1,483	5,094 00
	King's.....	58	101	361 00
	Lunenburg.....	925	1,228	4,606 00
	Pictou.....	23	41	146 00
	Queen's.....	292	510	1,825 00
	Richmond.....	1,294	2,238	8,008 00
	Shelburne.....	771	1,303	4,680 00
	Victoria.....	801	1,549	5,477 00
	Yarmouth.....	165	280	1,005 00
	Totals.....	8,886	15,738	56,123 00
New Brunswick.....	Charlotte.....	756	1,296	4,644 00
	Gloucester.....	1,229	3,193	10,811 00
	Kent.....	294	647	2,235 85
	Northumberland.....	8	23	77 00
	St. John.....	33	72	249 00
	Westmoreland.....	4	11	37 00
	Totals.....	2,324	5,242	18,053 85
Prince Edward Island..	King's.....	658	1,392	4,837 00
	Prince.....	392	1,180	3,941 00
	Queen's.....	142	452	1,498 00
	Totals.....	1,192	3,024	10,276 00
Quebec.....	Bonaventure.....	1,810	3,360	11,894 00
	Gaspé.....	2,385	4,846	16,914 00
	Rimouski.....	27	38	145 00
	Saguenay.....	544	997	3,542 00
	Totals.....	4,766	9,241	32,495 00

## RECAPITULATION.

Nova Scotia.....	8,886	15,738	56,123 00
New Brunswick.....	2,324	5,242	18,053 85
Prince Edward Island.....	1,192	3,024	10,276 00
Quebec.....	4,766	9,241	32,495 00
Grand totals.....	17,168	33,245	116,947 85
LESS—Refunds, N. S. Boats, \$24; N. B. Boats, \$3.00..			27 00
Total.....			116,920 85



## DETAILED STATEMENT of Fishing Bounties paid to Vessels, for the Year 1890.

## PROVINCE OF NOVA SCOTIA.

## ANNAPOLIS COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew.	Amount of Bounty Paid.
							\$ cts.
90,667	Edward Everett..	Digby .....	57	Fred. W. Thorne.....	Victoria Beach..	11	81 94
80,001	Florence.....	St. John, N. B. .	15	Jno. Magranahan....	Margaretville...	1	15 00
88,584	Index.....	Yarmouth.....	17	Robt. Magranahan....	do .....	2	21 25
94,693	John H. Kennedy	Digby.....	54	John S. Hayden .....	Victoria Beach..	5	69 44
75,594	Lizzie G.....	do .....	16	John Apt. ....	do .....	5	24 00
83,253	Rescue .....	Annapolis .....	17	Josiah Burrell .....	Clementsport...	4	22 95

## ANTIGONISH COUNTY.

96,787	Benicia Boy.....	Halifax.....	11	Lawrence Hylan.....	Straits of Canso..	2	13 75
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## CAPE BRETON COUNTY.

92,609	Belle of the Bay ..	Sydney.....	11	Patrick Burke .....	Mira Bay.....	4	14 85
88,507	Belle of Rome .....	do .....	14	Wm. Mann .....	Gabarus.....	5	21 00
77,851	Buxom.....	do .....	11	Daniel McGrath.....	Little Bras d'Or..	2	16 50
80,977	J. W. Ingraham...	do .....	14	Francis Dixon .....	Catalone.....	3	18 38
74,039	James Henry .....	do .....	18	C. W. Dunn.....	North Sydney...	3	21 60
77,844	May Flower.....	Halifax.....	19	John H. Burke.....	Little Lorraine..	3	28 50
80,974	Mary Ann .....	Sydney.....	19	Thomas Hart .....	Main-à-dieu.....	4	28 50
75,577	Mary Ann Bell....	Lunenburg.....	33	John Arseneault....	Little Bras d'Or..	6	43 32
72,047	Mary Moulton....	Arichat.....	26	Joseph Jessome.....	do .....	4	39 00
73,021	Marie Anne.....	Magdalen Islds.	46	John Arseneault....	do .....	8	62 10
92,600	Merit.....	Sydney.....	13	Alex. Leblanc, sen...	do .....	3	19 50
85,340	Ocean Ranger.....	Lunenburg.....	11	James O'Neil.....	Bateston.....	3	14 44
80,973	Ocean Wave .....	Sydney.....	20	Samuel Moore .....	Little Bras d'Or..	4	30 00
88,504	Quick Step.....	do .....	12	T., M. and F. Marsh..	Lingan.....	3	18 00
74,038	River Queen.....	do .....	32	Peter Desveaux.....	Little Bras d'Or..	6	48 00
77,857	Sailor's Bride....	do .....	11	Edward O'Brien.....	do .....	2	16 50
92,593	Thomas Parnell...	do .....	10	Wm. Anderson.....	North Sydney...	3	15 00

## DIGBY COUNTY.

75,612	Alice .....	Yarmouth.....	17	Handley Bates <i>et al.</i> ...	Freeport.....	6	25 50
90,660	Alice May.....	do .....	18	Bradish Bailey.....	Westport.....	8	27 00
83,431	Acadian.....	Weymouth.....	32	Samuel Thurber.....	Freeport.....	10	48 00
83,258	Alfred.....	Annapolis.....	22	Amos H. Outhouse...	Tiverton.....	8	33 00
72,978	Annie Coggins.....	Digby.....	22	Livingstone Coggins...	Westport.....	6	28 88
94,696	Annie M. Sproule.	do .....	70	John W. Sproule....	Litchfield.....	10	90 00
88,267	Bessie May.....	St. John, N.B. .	23	Edgar McDormand....	Westport.....	8	34 50
94,698	Carrie H.....	Digby.....	20	Angusles Haycock ..	do .....	7	30 00
74,331	Condor.....	Yarmouth.....	11	Howard Titus .....	do .....	4	14 85
75,771	Dove .....	do .....	20	Joseph Ossinger.....	Tiverton.....	7	30 00
88,403	David Sprague...	Digby.....	31	Collins Titus.....	Westport.....	2	31 01
80,797	Ella H.....	do .....	13	T. W. Whiteneck.....	Freeport.....	5	19 50
85,683	Edith L.....	do .....	16	Fred. Coggins .....	Westport.....	4	20 00
77,740	Elmer.....	do .....	15	Walter Coggins.....	do .....	6	22 50
75,757	Etta.....	Yarmouth.....	17	T. & J. W. C. Webber	do .....	6	25 50

DETAILED STATEMENT of Fishing Bounties paid to Vessels, &c.—Nova Scotia—Con.  
DIGBY COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew.	Amount of Bounty Paid.
							\$ cts.
90,662	Edward A. Horton	Digby	67	Joseph E. Snow	Digby	14	100 50
74,329	Fairy Queen	Yarmouth	13	Wallace Coggins	Westport	5	17 88
80,798	Freddie G	Digby	18	George Gower	do	6	27 00
75,614	Fawn	do	17	Isaac Peters	do	4	20 04
75,601	Flash	do	10	James A. Titus	do	5	15 00
83,260	Gazelle	Annapolis	20	D. & O. Sproule	Digby	6	27 86
80,800	Helen Maude	Digby	20	Chas. McDormand	Westport	7	30 00
80,799	Hattie T.	do	16	F. P. Titus	do	4	24 00
80,604	Jennie C	Yarmouth	16	Charles Hicks	do	6	24 00
97,026	James Farnham	do	31	John W. Snow	Digby	7	46 50
85,690	Lora T.	Digby	15	Joseph Thurber	Freeport	6	20 90
85,685	L. M. Ellis	do	35	Holland Outhouse	Tiverton	11	52 50
80,881	Lena May	St. Andrews	18	Wilnot Benson	Westport	6	27 00
88,404	Live Yankee	Digby	57	Howard Anderson	Digby	9	74 82
80,794	Minnie C	do	18	Charles Bailey	Westport	6	27 00
85,682	Malapert	do	22	James C. Glaven	do	8	33 00
83,257	Princess Lousie	Annapolis	21	John A. Smith	Tiverton	8	31 50
90,873	Primrose	Yarmouth	34	George Coggins	Westport	9	51 00
83,132	Restless	Digby	25	Jackson Coggins	do	8	37 50
85,558	S. A. Crowell	Yarmouth	23	Wallace Gower	Freeport	8	34 50
75,726	Thrush	do	13	Handley Outhouse	Tiverton	4	17 55
94,694	Utah Eunice	Digby	33	M. & E. Haines	Freeport	8	49 50
85,559	Willie	Yarmouth	12	S. Y. Haines & E. C. Thurber	do	6	18 00
72,980	Wave	Digby	11	Samuel Thurber	do	4	13 76
74,317	Willie	Yarmouth	21	Henry Glaven	Westport	8	31 50
75,722	Yuba	do	15	George Denton	do	6	22 50

GUYSBORO' COUNTY.

90,844	Armada	Guysboro'	25	Wm. O'Hara	Coddle's Harbour	6	37 50
80,991	Atalanta	do	80	Stephen Sweet	Isaac's do	11	101 25
90,736	Alert	Pt. Hawkesbury	11	W. A. Keating & John Fraser	Port Mulgrave	3	16 50
47,771	Atalia	Guysboro'	34	Thos. H. Peeples	Pirate Harbour	4	51 00
80,992	Annie W	do	10	Elijah Walters	Wine do	3	15 00
80,990	Bonnie Doon	do	13	Thomas Munroe	White Head	3	14 64
64,914	Blooming Dale	Halifax	13	Charles Horn	Dover	4	16 26
35,622	George	do	30	Norman McLeod	New Harbour	5	36 57
80,999	Guardian Angel	Guysboro'	21	Joseph Fougere, jun.	Larry River	5	28 88
57,715	John Laurance	Halifax	23	Alex. Henderson	New Harbour	5	31 63
80,840	Lettie May	Lunenburg	41	Enos. L. Munroe	White Head	6	49 21
80,964	Lizzie A.	Pt. Hawkesbury	20	J. F. & A. H. Reeves	Pirate Harbour	4	30 00
80,970	Orion	Halifax	24	Edward B. Pelrine	Larry River	5	33 00
75,892	Peter Mitchell	Pt. Hawkesbury	26	W. & Wm. P. Power	Pirate Harbour	5	39 00

HALIFAX COUNTY.

77,826	Abbie G.	Halifax	31	Walter Glawson	Pleasant Hbr.	4	38 76
61,625	Alpha	do	18	Lindsay Hubley	French Village	4	24 30
57,727	Agnes	do	21	John Hayes	Herring Cove	4	31 50
74,020	Addie	do	16	Dennis Fagan	Ketch Harbour	3	18 00
83,106	Annie Isabelle	do	23	Peter Bowser et al	Musquodoboit H	5	34 50
90,721	Brilliant Star	do	36	P. & J. Harting	East Jeddore	10	54 00
37,619	British Queen	do	20	Wm. Hubley	Spry Bay	6	30 00

DETAILED STATEMENT of Fishing Bounties paid to Vessels, &c.—Nova Scotia—*Con.*  
HALIFAX COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew.	Amount of Bounty Paid.
							\$ cts.
94,680	Bonnie Glen	Halifax	17	Wm. Murphy	Owls Head	5	25 50
94,662	Bessie Florence	do	12	C. W. Twohig	Pennant	3	18 00
90,496	Black Prince	do	18	J. W. Slaunwhite	Terrance Bay	3	27 00
74,071	Condor	do	20	G. J. & E. Julien	W. Chezzetcook	5	27 50
64,872	Catherine	do	20	A. & D. Lapierre	do	3	30 00
75,806	Can't Help It	do	57	Henry Beazley	Halifax	9	85 50
85,381	Champion	do	17	Edward Morrison	do	3	25 50
96,799	Catherine A. C.	do	17	Hezekiah Cleveland	Indian Harbour	3	25 50
61,629	Carrie R.	do	17	John Jollimore	Terrance Bay	3	25 50
83,320	Dessie M.	do	80	James T. Thompson	Halifax	16	120 00
77,607	Dianthus	Lunenburg	45	Joshua Dauphiney	Herring Cove	5	67 50
85,655	Daisy	Halifax	16	Wm. & C. Johnson	Indian Harbour	4	24 00
85,663	Daring	do	18	Chas. Slaunwhite, sen.	Terrance Bay	3	27 00
96,785	Eva M. B.	do	45	Daniel Bonang <i>et al.</i>	W. Chezzetcook	13	67 50
92,564	Evangeline	do	23	Daniel Baker	West Jeddore	9	34 50
80,832	Ella May	Lunenburg	16	Amos Murphy	French Village	3	24 00
74,091	Eastern Clipper	Halifax	35	John H. Fader	Hd. Margaret's B	4	52 50
90,481	Ella D.	do	32	Arch. Darrah	Herring Cove	7	48 00
90,726	Ellen Maud	do	16	George Schnare	Sambro	4	24 00
94,678	Extenuate	do	10	Alex. Tough	do	3	13 13
61,544	Emma Jane	do	21	Simon P. Slaunwhite	Terrance Bay	3	27 00
88,227	Fleetwing	do	32	Thos. Lapierre <i>et al.</i>	W. Chezzetcook	10	45 82
90,717	Florence	do	80	C. W. Anderson	Halifax	16	120 00
94,636	Fortuna	do	80	A. N. Whitman	do	18	120 00
83,180	Friend	do	17	Henry Fader	East Dover	3	25 50
85,644	Flora	do	42	P. A. Scallion	Herring Cove	8	63 00
55,836	Frank Newton	Sydney	40	Theo. Conrod	Sheet Harbour	9	60 00
90,489	Greenleaf	Halifax	44	Patk. Julien <i>et al.</i>	W. Chezzetcook	12	66 00
57,760	Guardian Angel	do	36	John McCarthy	Spry Bay	7	54 00
85,382	G. H. Marryat	do	24	E. A. Creighton	Halifax	5	36 00
96,782	Glide	do	10	Geo. Burgoyne	Hackett's Cove	2	15 00
94,963	Golden Seal	Lunenburg	32	Chas. W. Hart	Sambro	5	48 00
37,448	Gipsy Lass	Halifax	26	John P. Slaunwhite	Terrance Bay	5	39 00
88,220	Grandee	do	14	Aaron Martin	Sambro	3	21 00
92,574	H. W. Wentzel	do	36	John Ferguson	W. Chezzetcook	11	54 00
69,097	Highland Jane	do	32	George Hartlin	East Jeddore	10	48 00
77,788	Hesperus	do	16	Joseph Reyno	Herring Cove	3	24 00
83,134	Infant	do	15	John Reyno	do	3	22 50
83,306	Iona	do	26	Andrew Sullivan	do	7	39 00
74,080	J. A. Kirk	do	16	Geo. Boutilier	Mushaboon	3	19 20
54,132	John Franklin	do	18	Edward Dempsey	Herring Cove	4	27 00
94,665	Louis Luby	do	41	Wm. Lapierre <i>et al.</i>	W. Chezzetcook	14	61 50
96,789	Lydia A. Mason	do	39	Peter Mason	Tangier	8	58 50
74,099	Leading Breeze	do	15	D. F. & G. S. Covey	Hackett's Cove	3	22 50
94,661	L. C. Tough	do	12	John Tough	Pennant	3	18 00
69,105	Lady of the Lake	do	20	Richard Christian	Upper Prospect	4	25 00
96,790	Lilly C.	do	12	Wm. B. & Jno. Selig	do	3	13 50
85,385	Minnie M.	do	27	J. D. Gates & W. Nieforth	Seaforth	9	40 50
46,498	Mariner	do	56	W. C. & J. H. Henley	Spry Bay	9	84 00
83,108	Maud	do	15	Joseph Reyno	Herring Cove	4	22 50
94,671	Mary A. W.	do	13	Andrew Blakely	Indian Harbour	2	16 25
85,644	Mary E.	do	14	Andrew Twohig	Sambro	3	18 38
90,716	New Dominion	do	34	Jeremiah & Jos. Fillis	W. Chezzetcook	11	51 00
83,107	North Star	do	26	M. W. & G. M. Nieforth	Seaforth	7	36 57
80,841	Nina	do	13	Thos. O'Neal	Halifax	5	19 50
94,667	Nettie M. G.	do	32	S. Hubley & C. Garrison	Indian Harbour	9	48 00
80,843	Nettie B. H.	do	23	Jno. A. & Wm. Hearn	Upper Prospect	3	28 76
85,665	Nellie D.	do	12	Daniel Smith	Sambro	3	18 00
37,608	Ocean Belle	do	68	John Allen & Sons	Halifax	5	87 44
64,018	Ocean Bride	do	23	Matthew Lynch	Ferguson's Cove	5	34 50
92,571	Primrose	do	14	Jas. F. Slaunwhite	Terrance Bay	3	21 00
77,729	Royal Charlie	do	31	Alex. Jennex	Jeddore	7	39 54



DETAILED STATEMENT of Fishing Bounties paid to Vessels, &c.—Nova Scotia—*Con.*  
 HALIFAX COUNTY—*Concluded.*

Official Number.	Name of Vessels.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew.	Amount of Bounties Paid.
							\$ cts.
59,462	Rival.....	Halifax.....	18	Henry Falconer.....	Lakeville.....	7	27 00
77,787	Rescue.....	do.....	20	James Fader.....	East Dover.....	5	30 00
53,551	Roving Bird.....	do.....	24	John Brown.....	Herring Cove.....	4	36 00
92,575	Robinetta.....	do.....	14	Wm. S. Henneberry..	Sambro.....	2	21 00
88,223	River Belle.....	do.....	11	Jno. D. Christian.....	Upper Prospect.....	4	16 50
75,575	Rising Dawn.....	Lunenburg.....	18	John W. Hurley.....	do.....	4	24 30
53,600	Starlight.....	Halifax.....	29	Thomas Cooper.....	Musquodoboit Harbour.....	8	43 50
74,087	Sea Gem.....	do.....	30	Wm. Gennox.....	East Jeddore.....	8	45 00
37,519	Safe Guide.....	do.....	36	W. Chas. Henley.....	Spry Bay.....	7	54 00
94,675	Success.....	do.....	16	Isaac Prest.....	do.....	5	24 00
41,787	Silver Dart.....	do.....	30	John W. Hutt.....	do.....	6	41 79
83,114	Sailor's Fancy.....	do.....	16	Lawson Pace.....	Glen Margaret.....	3	24 00
85,390	Susan C.....	do.....	21	Daniel Croucher.....	Hackett's Cove.....	3	31 50
64,869	Sarah L. Oxner.....	do.....	33	Edward Hayes.....	Herring Cove.....	8	49 50
96,792	Success.....	do.....	21	Geo. J. Longard.....	Upper Prospect.....	5	31 50
90,494	Two Brothers.....	do.....	21	J. Ferguson & E. Roast	EastChezzetcook.....	7	31 50
75,833	Twilight.....	do.....	14	Eli Baker.....	East Jeddore.....	5	19 25
90,490	T. W. Wolfe.....	do.....	31	Charles Wolfe <i>et al.</i> ...	W. Chezzetcook.....	9	46 50
77,836	T. W. Smith.....	do.....	35	Charles Beaver.....	Spry Bay.....	7	52 50
61,946	Union.....	do.....	22	Colin Mitchell.....	East Jeddore.....	7	33 00
57,662	Village Bride.....	do.....	24	Andrew Crawford.....	EastChezzetcook.....	8	36 00
90,485	Violet West.....	do.....	36	Chas. Nieforth.....	Seaforth.....	11	54 00
88,609	Virgesco.....	Lunenburg.....	57	Geo. E. Boak & Co. ...	Halifax.....	2	54 97
90,723	Winnie L.....	Halifax.....	31	Daniel Manet <i>et al.</i> ...	W. Chezzetcook.....	10	46 50
83,042	Western Belle.....	do.....	23	John Thomas.....	Herring Cove.....	7	34 50
75,578	Wily.....	Lunenburg.....	13	James Morash, jr.....	West Dover.....	4	19 50
92,578	Willetta.....	Halifax.....	12	Joseph Gray.....	Sambro.....	3	18 00
85,378	Zephyr.....	do.....	14	Robt. Slaunwhite.....	Terrance Bay.....	3	21 00
73,966	do.....	do.....	27	J. I. & S. Harpell.....	West Jeddore.....	6	40 50

INVERNESS COUNTY.

90,731	Annie E. Paint...	Pt. Hawkesbury	80	W. H. & F. L. M. Paint.	Pt. Hawkesbury	8	100 00
90,739	Arizona.....	do.....	49	do.....	do.....	5	73 50
75,783	Crescent.....	Arichat.....	26	Camille White.....	Cheticamp.....	8	39 00
41,925	Euxine.....	do.....	38	Arsène Doucet.....	do.....	10	57 00
90,734	H. M. Crosby.....	Pt. Hawkesbury	64	Peter Paint, jun.....	Strait of Canso.....	14	90 00
96,763	Lelia Linwood.....	do.....	67	W. H. & F. L. M. Paint.	Pt. Hawkesbury	8	83 78
92,313	Martha.....	Liverpool.....	10	Eusébe Chiasson.....	Cheticamp.....	5	15 00
69,125	May Flower.....	Halifax.....	11	Hyacinthe Chiasson...	do.....	4	16 50
96,761	Quick.....	Pt. Hawkesbury	13	Dennis Burns.....	do.....	5	19 50
73,119	Royal.....	Halifax.....	12	Leonard Embree.....	Pt. Hawkesbury	5	18 00
83,094	St. Mary.....	Pt. Hawkesbury	15	D. Chesson.....	Margaree.....	5	22 50
90,733	St. Joseph.....	do.....	27	Jno. G. Crowdis.....	do.....	7	40 50
74,335	Safe.....	Yarmouth.....	35	David Doucet.....	Grand Etang.....	10	52 50
92,567	Trial.....	Halifax.....	12	M. Chesson & P. Gallant	Margaree.....	4	16 20
64,718	Temperance.....	Pt. Hawkesbury	26	Jno. McFarlane.....	do.....	5	31 69
73,962	Willie B.....	Liverpool.....	38	Wm. Delaney.....	do.....	10	57 00

KING'S COUNTY.

94,727	Aurelia.....	Windsor.....	21	H. & J. Parker.....	Hall's Harbour.....	2	31 50
75,430	Dolphin.....	Annapolis.....	11	Henry E. Ogilvie.....	Cornwallis.....	2	16 50
49,411	Ellen.....	Yarmouth.....	29	Arthur Ogilvie.....	do.....	2	43 50
92,486	Notilus.....	Windsor.....	11	Jos. Meisner.....	Chipman Brook.....	2	12 38
85,629	Unexpected.....	Parrsboro'.....	15	Fred. Parker.....	Hall's Harbour.....	2	22 50
85,508	Zelina.....	St. John, N.B.....	14	Jas. E. Ogilvie.....	Cornwallis.....	2	21 00

DETAILED STATEMENT of Fishing Bounties paid to Vessels, &c.—Nova Scotia—*Con.*

## LUNENBURG COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew.	Amount of Bounty Paid.
							\$ cts.
94,783	Alaska..	Lunenburg..	80	Benj. Anderson, M.O.	Lunenburg..	14	120 00
83,176	Amazon.....	do .....	73	Jessen Anderson, M.O.	do .....	12	109 50
90,864	Advance.....	do .....	80	L. Anderson & Co., M. O's.....	do .....	14	120 00
94,965	Alice B.....	do .....	66	Adnah Burns.....	La Have .....	12	99 00
96,831	Argo.....	do .....	42	Leander Oxner.....	do .....	9	63 00
94,790	Abana.....	do .....	80	Jno. M. Ritcey, M.O.	do .....	14	120 00
90,866	Alice.....	do .....	12	Solomon Richard, M.O.	do .....	3	18 00
90,870	Arietis.....	do .....	80	Chas. Hewit.....	Lunenburg..	17	120 00
94,778	Argosy.....	do .....	80	Chas. Smith, M.O.	do .....	14	120 00
90,600	Acadia.....	do .....	79	David Smith.....	do .....	13	114 26
90,852	Athlete.....	do .....	78	Jno. B. Young, M.O.	do .....	12	117 00
94,644	Angler.....	do .....	80	A. H. Zwicker, M.O.	do .....	14	120 00
94,961	Altona.....	do .....	67	Emmanuel Zellers.....	do .....	13	100 50
92,637	Bertie C. H.....	do .....	80	Wm. Gilfoy, M.O.	do .....	14	120 00
94,784	B. C. Smith.....	do .....	80	Joshua Hirtle.....	do .....	14	120 00
85,730	Beulah.....	do .....	80	Hibbert Lohnes, M.O.	La Have .....	14	120 00
94,647	Bonus.....	do .....	80	Jno. M. Ritcey, M.O.	do .....	14	120 00
94,648	Batavia.....	do .....	80	Jas. Spearwater, M.O.	do .....	14	120 00
96,823	Burnam H.....	do .....	80	Benj. Morash.....	Lunenburg..	14	120 00
94,782	Bona Fides.....	do .....	80	J. Joseph Rudolph.....	do .....	14	120 00
96,828	Bonanza.....	do .....	80	Chas. Silver, M.O.	do .....	14	120 00
94,658	C. A. Ernst.....	do .....	57	Abraham Ernst.....	Mahone Bay...	11	81 93
94,645	C. A. Chisholm.....	do .....	80	do .....	do .....	12	120 00
97,084	Calla Lily.....	do .....	62	Edmund Hirtle, M.O.	La Have .....	12	93 00
97,081	Carrie.....	do .....	80	Albert McKean.....	Pleasantville...	13	120 00
90,857	Capio.....	do .....	71	do .....	do .....	12	106 50
94,652	Cashier.....	do .....	80	W. N. Reinhardt, M.O.	La Have .....	16	120 00
90,856	Cleta.....	do .....	80	do .....	do .....	14	120 00
88,348	Cymbeline.....	do .....	80	J. N. Rafuse, M.O.	do .....	15	120 00
96,825	Cecilia W.....	do .....	41	Robt. Walfield, M.O.	do .....	8	61 50
94,643	Carrie M. C.....	do .....	39	Norman Chandler.....	Fox Point.....	9	58 50
94,653	C. U. Mader.....	do .....	80	C. U. Mader, M.O.	Mahone Bay...	14	120 00
85,642	Charlotte E. C.....	do .....	80	do .....	do .....	10	110 00
90,869	Clara E. Mason.....	do .....	80	David Smith.....	Lunenburg..	12	120 00
94,646	Carrie C. W.....	do .....	80	Martin Westhaver.....	Martin's Brook..	14	109 42
92,622	Coronet.....	do .....	80	A. H. Zwicker, M.O.	Lunenburg..	14	120 00
90,824	Ceto.....	do .....	80	James Conrad, M.O.	La Have.....	14	120 00
97,085	D. Cronin.....	do .....	59	Lewis Strum.....	Mahone Bay...	11	88 50
88,355	D. A. Mader.....	do .....	80	C. U. Mader, M.O.	do .....	10	110 00
90,855	Delta.....	do .....	24	Alex. Greek.....	Lunenburg.....	7	36 00
88,618	Darling.....	do .....	80	Jacob Sarty, M.O.	La Have.....	14	120 00
42,505	Delight.....	do .....	49	Abraham Ernst.....	Mahone Bay.....	8	69 42
97,089	Dictator.....	do .....	80	S. Watson Oxner, M.O.	Lunenburg..	14	120 00
96,826	Director.....	do .....	80	David Smith, M.O.	do .....	14	120 00
88,358	Dolphin.....	do .....	80	Howard Wynacht.....	do .....	14	120 00
85,736	Dominion.....	do .....	80	Wm. Young, M.O.	do .....	14	120 00
75,569	Empress.....	do .....	47	Simon Pentz, M.O.	La Have.....	10	70 50
96,821	Edgar F. Richard.....	do .....	55	Elias Richard, sen.....	do .....	11	82 50
94,960	Eureka.....	do .....	80	Reuben Smith, M.O.	do .....	14	120 00
94,650	Elsie.....	do .....	47	Jno. Schmeisser, M.O.	do .....	12	70 50
83,308	Ella.....	Liverpool.....	10	Hugh Stanford.....	Chester.....	2	15 00
85,731	Eva L. H.....	Lunenburg..	62	Jacob Hiltz.....	Mahone Bay.....	10	93 00
88,356	Energy.....	do .....	80	C. U. Mader, M.O.	do .....	14	120 00
94,659	Enterprise.....	do .....	80	Albert Cleversey, M.O.	La Have.....	14	120 00
90,584	Eldorao.....	do .....	75	Jno. Creaser, M.O.	do .....	12	112 50
94,771	Florence M. Smith.....	do .....	80	Benj. Anderson.....	Lunenburg.....	14	120 00
85,361	Florin Belle.....	do .....	80	James A. Hirtle.....	do .....	11	120 00
94,656	Forest.....	do .....	58	Edwin Kaulbach, M.O.	do .....	10	87 00
94,957	Feronia.....	do .....	77	Jno. H. Kaulbach.....	Mahone Bay.....	12	115 50
94,952	Finance.....	do .....	58	Jno. Hines, M.O.	Bridgewater.....	9	82 65
88,357	Floresta.....	do .....	57	Stephen Mosher, M.O.	Lunenburg.....	12	85 50



DETAILED Statement of Fishing Bounties paid to Vessels, &c.—Nova Scotia—*Con.*

## LUNENBURG COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew.	Amount of Bounties Paid.
92,638	Florence M. ....	Lunenburg. ....	80	Alex. Silver. ....	Lunenburg. ....	11	115 00
96,836	Gleaner. ....	do. ....	80	Wm. C. Acker, M.O. ....	do. ....	10	110 00
90,862	Grenada. ....	do. ....	80	Reuben Romkey, M.O. ....	La Have. ....	14	120 00
88,347	Geneva. ....	do. ....	80	Henry Wilson, M.O. ....	Lunenburg. ....	15	120 00
94,773	Galatea. ....	do. ....	80	Jno. B. Young, M.O. ....	do. ....	14	120 00
90,582	G. A. Smith. ....	do. ....	80	Wm. Young, M.O. ....	do. ....	14	120 00
97,088	Glendale. ....	do. ....	38	Chas. Bell, M.O. ....	La Have. ....	8	57 00
90,859	Hector W. McG. ....	do. ....	80	Wm. McGregor, M.O. ....	do. ....	14	120 00
96,837	Irving G. ....	do. ....	80	Henry Gerhardt, M.O. ....	Lunenburg. ....	14	120 00
90,585	Iris. ....	do. ....	80	David Smith, M.O. ....	do. ....	14	120 00
92,639	Jennie Miller. ....	do. ....	80	Henry Adams, M.O. ....	do. ....	12	120 00
85,723	Jessie A. Loye. ....	do. ....	80	James A. Hirtle. ....	do. ....	15	112 94
94,770	Joseph O. ....	do. ....	53	Thomas Oakley, M.O. ....	La Have. ....	11	79 50
94,789	Joseph McGill. ....	do. ....	80	David Ritcey, M.O. ....	do. ....	14	120 00
83,485	Jno. M. Inglis. ....	Liverpool. ....	79	J. S. Wolfe, M.O. ....	West Dublin. ....	15	118 50
94,785	J. C. Schwartz. ....	Lunenburg. ....	80	Chas. Hewitt, M.O. ....	Lunenburg. ....	14	120 00
94,654	J. W. Geldert. ....	do. ....	80	S. Watson Oxner, M.O. ....	do. ....	14	120 00
96,830	J. A. Silver. ....	do. ....	80	Chas. L. Silver, M.O. ....	do. ....	14	120 00
74,019	Jewel. ....	do. ....	52	Leonard Young. ....	do. ....	11	78 00
96,833	L. E. Young. ....	do. ....	80	Benj. Anderson, M.O. ....	do. ....	15	120 00
88,352	Linaria. ....	do. ....	80	U. W. Falt. ....	Little River. ....	14	120 00
94,788	Laura C. Zwicker. ....	do. ....	80	Abraham Ernst. ....	Mahone Bay. ....	12	120 00
88,360	Lettie M. Hardy. ....	do. ....	80	W. A. Pickels. ....	do. ....	14	120 00
90,854	Latona. ....	do. ....	80	S. Watson Oxner, M.O. ....	Lunenburg. ....	14	120 00
96,838	La France. ....	do. ....	80	do. ....	do. ....	14	120 00
90,867	Laura A. Smith. ....	do. ....	80	do. ....	do. ....	14	120 00
83,351	Louisa J. Selig. ....	do. ....	80	J. Moyle Rudolph, M.O. ....	do. ....	14	120 00
96,827	Leopold. ....	do. ....	80	Charles Smith. ....	do. ....	12	111 42
96,832	Lora M. Knock. ....	do. ....	80	David Smith, M.O. ....	do. ....	14	120 00
94,781	Leonora B. Winter. ....	do. ....	80	do. ....	do. ....	14	120 00
94,780	Laurence. ....	do. ....	80	Wm. Zwicker. ....	do. ....	14	116 00
94,772	Molega. ....	do. ....	80	Benj. Anderson, M.O. ....	do. ....	14	120 00
92,640	Minerva. ....	do. ....	80	Wm. C. Acker, M.O. ....	do. ....	13	120 00
94,777	Maurice C. Geldert. ....	do. ....	80	Geo. Geldert, M.O. ....	do. ....	15	120 00
94,775	Malabar. ....	do. ....	80	R. H. Griffiths. ....	do. ....	14	120 00
83,173	Maggie Smith. ....	do. ....	80	Reuben Smith, M.O. ....	La Have. ....	10	120 00
90,823	Miletus. ....	Port Medway. ....	80	Jno. Shanks, M.O. ....	do. ....	14	120 00
92,633	Magnolia. ....	Lunenburg. ....	80	Joshua Heckman, sen., M.O. ....	Lunenburg. ....	12	120 00
94,951	Maggie McNeil. ....	do. ....	75	F. L. McNeil. ....	do. ....	12	112 50
74,319	Merino. ....	do. ....	46	J. Joseph Rudolph. ....	do. ....	9	69 00
92,635	M. B. Smith. ....	do. ....	80	Wm. C. Smith. ....	do. ....	15	120 00
90,586	Morris Wilson. ....	do. ....	80	J. H. Wilson. ....	do. ....	13	115 71
92,632	Monarch. ....	do. ....	80	do. ....	do. ....	14	120 00
88,342	Nova Zembla. ....	do. ....	80	Freeman Anderson, M.O. ....	do. ....	12	120 00
88,603	Nokomis. ....	do. ....	80	C. U. Mader, M.O. ....	Mahone Bay. ....	14	120 00
92,634	Nellie B. ....	do. ....	80	Alfred Heisler, M.O. ....	Lunenburg. ....	12	108 00
94,966	Nicanor. ....	do. ....	79	David Westhaver. ....	Martin's Brook. ....	12	118 50
92,636	Nonpareil. ....	do. ....	80	Jno. Zinck. ....	Lunenburg. ....	14	120 00
94,655	Nevada. ....	do. ....	46	James Bell. ....	La Have. ....	9	69 00
90,598	Osprey. ....	do. ....	80	Christian Geldert. ....	Lunenburg. ....	14	120 00
88,346	Olive. ....	do. ....	80	Daniel Getson, M.O. ....	La Have. ....	14	120 00
90,587	Ornatius. ....	do. ....	80	Albert McKean, M.O. ....	Pleasantville. ....	12	120 00
94,641	Ovando. ....	do. ....	80	Jeffrey Publicover, M.O. ....	La Have. ....	13	120 00
94,954	Otto. ....	do. ....	80	Abraham Ernst. ....	Mahone Bay. ....	12	120 00
94,786	Ontario. ....	do. ....	80	W. A. Jefferson. ....	Lunenburg. ....	14	120 00
85,562	Oresa. ....	Barrington. ....	14	Arthur Mason. ....	do. ....	5	21 00
94,779	O. P. Silver. ....	Lunenburg. ....	80	Chas. L. Silver. ....	do. ....	14	120 00
94,774	Puritan. ....	do. ....	80	James Kreser. ....	La Have. ....	14	120 00
85,647	Pembina. ....	do. ....	80	L. Anderson & Co. ....	Lunenburg. ....	14	120 00
85,331	Parisian. ....	do. ....	80	Allan R. Morash, M.O. ....	do. ....	14	120 00



DETAILED STATEMENT of Fishing Bounties paid to Vessels, &c.—Nova Scotia—*Con.*LUNENBURG COUNTY—*Concluded.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew.	Amount of Bounty Paid.
							¢ cts.
92,320	Rialto.....	Liverpool.....	46	L. B. Currie, M. O....	New Dublin ...	10	69 00
90,593	Ralph.....	Lunenburg.....	51	Solomon Smith, M.O....	La Have.....	10	76 50
97,087	Robt. C. Bruhm ..	do .....	61	Abraham Ernst.....	Mahone Bay....	11	91 50
96,834	Robt. F. Masson..	do .....	80	Martin Mason, M. O....	Lunenburg.....	14	120 00
85,349	Rise Over.....	do .....	80	Wm. Smeltzer, M. O....	do .....	12	120 00
94,962	Stella E.....	do .....	80	Reuben Ritcey, M. O....	La Have.....	14	120 00
74,096	Silver Stream.....	Halifax.....	35	David Mills.....	Chester.....	5	52 50
92,629	Sea Queen.....	Lunenburg.....	21	Geo. Young, sr.....	Mill Cove.....	3	31 50
88,349	Senovar.....	do .....	80	Nathan Hiltz.....	Martin's River..	13	115 71
90,868	Sadie.....	do .....	79	Chas. Smith, M. O....	Lunenburg.....	14	118 50
94,787	Samoa.....	do .....	80	James Smith, M. O....	do .....	14	120 00
94,657	T. W. Langille....	do .....	71	Francis Conrad, M. O....	do .....	12	106 50
92,623	Torridon.....	do .....	80	Wm. McGregor, M. O....	La Have.....	14	120 00
97,086	Veria G.....	do .....	53	J. Getson, M. O....	do .....	12	79 50
94,956	Venezuela.....	do .....	80	Wm. Mossman, M. O....	Kingsbury.....	14	120 00
83,164	Valiant.....	do .....	80	Ammon Ritcey, M. O....	La Have.....	13	120 00
85,635	Vanilla.....	do .....	80	John M. Ritcey, M. O....	do .....	14	120 00
94,649	Valenar.....	do .....	80	Nathan Hiltz.....	Martins River..	12	120 00
85,334	Valorus.....	do .....	57	Benjamin Lohnes.....	Lunenburg.....	13	85 50
85,735	Victory.....	do .....	80	Leonard Young, M. O....	do .....	14	120 00
90,597	Vivian.....	do .....	80	A. H. Zwicker, M. O....	do .....	13	115 71
94,776	Volunteer.....	do .....	80	Stannage Craeser, M. O....	La Have.....	14	120 00
94,953	W. D. Richard....	do .....	80	W. N. Reinhardt, M. O....	do .....	12	120 00
96,829	Wisteria.....	do .....	80	Freeman Anderson, M. O....	Lunenburg.....	14	120 00
94,642	Winnie C.....	do .....	55	Edmen Walters, M. O....	La Have.....	12	82 50
94,967	White Cloud.....	do .....	80	C. M. Mader, M. O....	Mahone Bay....	14	120 00
83,174	W. E. Young.....	do .....	80	J. H. Wilson.....	Lunenburg.....	14	109 42
71,368	Zelu.....	do .....	20	Wm. Westhaver.....	Martins Brook..	6	30 00

## QUEEN'S COUNTY.

85,344	Donzella.....	Lunenburg.....	80	Adam Selig.....	Voglers Cove...	14	120 00
90,825	Henry W. Batchelder ..	Port Medway...	80	S. E. Teel .....	do .....	14	120 00
83,316	Lottie.....	do .....	80	do .....	do .....	15	120 00
83,494	Lizzie Wharton...	do .....	80	A. Y. Seely.....	do .....	16	120 00
92,330	Mary E. Leslie...	Liverpool.....	80	A. W. Hendry.....	Liverpool.....	16	120 00
75,762	May Queen.....	do .....	17	Joseph Winter.....	do .....	4	25 50
80,838	Ocean Bride.....	Lunenburg.....	20	George Mack.....	Port Medway...	7	30 00
69,187	Queen of the Fleet.	do .....	45	John Hutt.....	Liverpool.....	8	67 50
92,325	Rattler.....	Liverpool.....	13	Wm. Rhynard.....	Brooklyn.....	5	19 50
83,500	Stella.....	do .....	10	Wm. J. Farquhar...	Hunts Point....	3	15 00
83,314	Spartan.....	Port Medway...	80	L. B. Cohoon.....	Port Medway...	17	120 00
97,041	W. H. Smith.....	Liverpool.....	43	Willard P. Godfrey...	Brooklyn.....	10	64 50

## RICHMOND COUNTY.

83,086	Adda M.....	Pt. Hawkesbury.	20	Wm. Burk.....	River Bourgeois.	5	30 00
77,544	Alpha.....	Arichat.....	41	Wm. LeVisconte....	D'Escousse.....	10	58 71
64,713	Amelia M.....	Pt. Hawkesbury.	13	Andrew Boudreau...	Gros-nez.....	4	19 50
88,501	B. Weir & Co....	Arichat.....	25	Wm. J. Bissett....	River Bourgeois.	7	35 15
35,996	Blue Bell.....	do .....	25	D. Gruchy & Son....	Poulaumont....	8	33 76
75,561	Boreas.....	Lunenburg.....	41	John Colford.....	Port Richmond.	5	56 38
72,061	C. P. M.....	Arichat.....	22	Desiré Burk.....	River Bourgeois.	6	33 00
74,100	Candid.....	do .....	23	Desiré M. Burk.....	do .....	7	34 50
43,169	Chatham Head....	Miramichi, N.B.	24	Rémi Fougère.....	D'Escousse.....	8	36 00

DETAILED STATEMENT of Fishing Bounties paid Vessels, &c.—Nova Scotia—*Con.*  
 RICHMOND COUNTY—*Continued.*

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew.	Amount of Bounty Paid.
							\$ cts.
92,597	Dreadnot.....	Sydney.....	10	Fred. Manbourquette..	Upper L'Ardoise	3	15 00
69,190	Emma.....	Arichat.....	47	A. J. Boyd.....	River Bourgeois.	10	70 50
38,477	Elizabeth.....	do.....	18	Placide Burk.....	do.....	6	27 00
77,843	Elizabeth.....	Halifax.....	30	Isidore Sampson.....	do.....	8	45 00
75,616	Eliza Jane.....	Shelburne.....	22	Alex. Vigneau.....	Arichat.....	2	33 00
77,822	Eliza Smith.....	Arichat.....	44	Patience Poirier.....	D'Escousse.....	11	66 00
83,395	Elerie.....	Halifax.....	29	Docité Fougère.....	River Bourgeois.	6	43 50
61,617	Eva May.....	Guysboro'.....	29	Daniel Samson.....	River Bourgeois.	8	43 50
83,033	Emma Proctor.....	Pt. Hawkesbury.....	41	James Proctor.....	Riv. Inhabitants	10	61 50
61,606	Edmund Russell.....	Arichat.....	28	Joseph Walker.....	Basin River Inhabitants.....	3	42 00
74,166	Fama.....	Halifax.....	43	Wm. LeVisconte.....	D'Escousse.....	8	55 71
83,399	Fanny R. C.....	do.....	22	Peter Boudreau.....	River Bourgeois.	7	33 00
88,599	Guide.....	do.....	38	Joseph Poirier.....	L'er D'Escousse.	9	51 82
83,088	Good Intent.....	Pt. Hawkesbury.....	22	John Walker.....	Basin River Inhabitants.....	3	33 00
90,375	Hector.....	do.....	11	Joseph Catherine.....	Lakeside.....	2	16 50
53,577	Ilda.....	do.....	27	A. H. Bartol.....	Port Richmond.	3	30 39
83,135	J. B. M.....	Halifax.....	20	Abram Fougère, jun.....	River Bourgeois.	7	30 00
80,972	John Vincin.....	Sydney.....	17	David Sampson.....	do.....	6	25 50
88,454	Jubilee.....	Arichat.....	34	D. Gruchy & Son.....	Poulamond.....	9	48 45
38,486	Julia.....	do.....	20	Louis Burk.....	River Bourgeois.	6	30 00
85,560	Jacques.....	Yarmouth.....	58	S. & F. Poirier.....	D'Escousse.....	11	80 32
85,724	Jumbo.....	Halifax.....	20	Henry Lindon.....	Torbay.....	7	30 00
83,091	Jennie.....	Pt. Hawkesbury.....	11	P. C. Bosdet.....	West Arichat.....	2	16 50
72,071	Lumen Diei.....	Arichat.....	20	Urbain Samson.....	River Bourgeois.	6	30 00
72,070	Lennox.....	do.....	46	D. Gruchy & Son.....	Poulamond.....	12	69 00
75,875	Lida & Lizzie.....	do.....	55	Wm. LeVisconte.....	D'Escousse.....	8	68 77
88,455	Laura Victoria.....	do.....	38	John Manger.....	Cape LaRonde.....	11	57 00
38,516	Lady of the Lake.....	do.....	25	Peter Landry, jun.....	French Cove.....	7	37 50
38,522	Mary.....	do.....	23	Isaiah Boudrot.....	River Bourgeois.	7	34 50
46,082	Mary.....	Pt. Hawkesbury.....	43	D. Gruchy & Son.....	Poulamond.....	10	61 57
38,459	Mary Ann.....	Arichat.....	29	A. & P. Petipas.....	D'Escousse.....	8	41 09
88,431	Mayflower.....	Halifax.....	21	Stephen Dugas.....	River Bourgeois.	6	31 50
72,063	Mayflower.....	Arichat.....	12	M. Burke & M. Fougère.....	French Cove.....	5	18 00
69,969	Morning Light.....	Pt. Hawkesbury.....	39	David Walker.....	Basin River Inhabitants.....	5	58 50
38,413	Morning Star.....	Arichat.....	25	Amable Paté.....	River Bourgeois.	8	35 42
83,100	Morning Star.....	Pt. Hawkesbury.....	13	Abraham Gerroir.....	Port Royal.....	2	19 50
38,417	Messenger.....	Arichat.....	29	Dominick Fougère.....	Poulamond.....	9	43 50
72,048	Neptune.....	do.....	26	Henry Sampson.....	River Bourgeois.	5	39 00
42,388	Nimble.....	Halifax.....	44	P. W. Gruchy.....	D'Escousse.....	10	63 00
74,365	Nova Stella.....	Arichat.....	53	Leonie Poirier.....	do.....	14	79 50
54,139	Ocean Belle.....	Halifax.....	20	A. J. Boyd.....	River Bourgeois.	7	30 00
61,630	Olive J.....	do.....	57	Peter Malcolm.....	Pt. Malcolm.....	10	85 50
72,067	Philomen D.....	Arichat.....	22	Tranquil Digout.....	River Bourgeois.	7	33 00
38,462	Partners.....	do.....	26	Thomas Sampson.....	do.....	8	39 00
74,332	Proditor.....	Halifax.....	53	Alfred Poirier.....	D'Escousse.....	14	79 50
69,959	Quickstep.....	Pt. Hawkesbury.....	35	Lewis Murray.....	Port Richmond.....	2	39 38
88,452	R. Ferguson.....	Arichat.....	24	A. J. McDonald.....	Soldier's Cove.....	7	36 00
72,059	Richmond Queen.....	Halifax.....	37	Anselme Fougère.....	D'Escousse.....	10	55 50
64,033	Ripple.....	Pt. Hawkesbury.....	34	J. W. & G. A. Cruickshanks.....	Port Richmond.....	3	44 63
51,781	S. E. Cove.....	Arichat.....	54	Peter Campbell.....	River Bourgeois.	12	81 00
36,521	Shooting Star.....	do.....	33	Wm. LeVisconte.....	D'Escousse.....	8	46 75
37,612	Sea Slipper.....	Lunenburg.....	40	Chas. Manger.....	Cape LaRonde.....	11	60 00
83,093	Swallow.....	Pt. Hawkesbury.....	12	Joseph A. Walker.....	Basin River Inhabitants.....	2	18 00
38,480	Two Brothers.....	Arichat.....	32	Simon Landry.....	River Bourgeois.	8	48 00
92,599	Thistle.....	Sydney.....	11	A. Manbourquette.....	Upper L'Ardoise	3	16 50
61,990	Union.....	Halifax.....	20	Felix Burke.....	River Bourgeois.	7	30 00
38,523	Victoria.....	Arichat.....	24	H. & P. Burke.....	Bras d'Or Lake.....	6	36 00
71,034	Vanguard.....	Barrington.....	47	Dominique Boudreau.....	Petit de Grat.....	10	70 50
61,921	W. E. Weir.....	Arichat.....	41	Chas. Fougère.....	D'Escousse.....	12	61 50



DETAILED STATEMENT of Fishing Bounties paid Vessels, &c.—Nova Scotia—*Con.*

## SHELBURNE COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew.	Amount of Bounty Paid.
							\$ cts.
94,632	A. C. Greenwood.	Shelburne	14	Thos. D. Goodick.	Sandy Point.	6	21 00
90,655	Annina	Yarmouth	11	Isaiah Smith.	Woods Harbour.	7	16 50
83,054	Ardella	Shelburne	80	Jonathan Locke.	Lockeport.	16	120 00
88,552	Afton	do	72	do	do	14	104 40
90,426	Amanda	Barrington	38	B. C. Newell.	Barrington	10	57 00
75,721	Angeline	Yarmouth	67	Raymond Wilson.	do	12	87 94
88,551	Blanche M. Thorburn.	Shelburne	80	Jno. H. Thorbourne.	Jordan Bay.	18	114 00
85,490	Billy Brown	do	80	Adam Firth	Shelburne	16	120 00
90,900	Bertha Kelley	Yarmouth	12	Wm. P. Snow	Port La Tour.	2	18 00
66,722	C. Averett.	Liverpool	18	Alex. Goreham.	Woods Harbour.	6	27 00
94,942	Coronilla	Shelburne	23	C. Locke & Co.	Lockeport	7	32 35
61,905	Champion	Liverpool	14	Joseph W. Hopkins.	Barrington.	6	21 00
75,624	Dwina	Shelburne	52	Wm. Lloyd, jun	Lockeport	11	78 00
83,492	Dessie	Liverpool	11	Alex. McIntosh.	do	3	13 20
96,963	Enterprise.	Shelburne	18	Edward Greenwood.	N. E. Harbour.	5	27 00
83,043	Ella A. Downie.	do	73	Enos Churchill.	Lockeport	15	106 08
77,603	Eldon C.	Barrington.	27	Colin C. Nickerson.	Woods Harbour.	8	40 50
90,645	Fly.	Yarmouth	15	Robert Nickerson.	do	7	21 10
85,476	Fleetwing.	Shelburne	11	Edward Hammond	Jordan Bay.	5	16 50
83,255	Floyd.	Annapolis	20	Thos. D. Crowell.	Shag Harbour	8	28 30
85,503	G. P. Taylor.	St. John, N.B.	14	James L. Purdy	do	5	21 00
80,831	Glide.	Lunenburg.	16	Jacob Lloyd	West Head.	6	24 00
85,478	Glenora.	Shelburne	75	Jno. Locke.	Lockeport	13	99 28
85,568	Georgie Harold.	Barrington.	80	Uriah H. Lyons	Barrington	16	120 00
90,647	Hattie Emeline.	Yarmouth.	11	Charles Reynolds.	Green Hill.	5	16 50
75,552	Hannah Eldridge.	Barrington.	57	Wm. B. Smith.	Cape Island	16	77 49
94,941	John Purney	Shelburne	80	John Purney.	Shelburne	19	117 00
88,554	Jersey Lily	do	80	Enos Churchill.	Lockeport	16	120 00
85,566	J. Lyons.	Barrington.	15	Thos. L. Banks.	Barrington	3	19 69
73,967	Katie	Liverpool	14	Arthur Williams	East Green Hbr.	6	21 00
90,642	Komaroff	Yarmouth	10	John B. Storms.	West Baccaro.	3	15 00
77,761	Knight Templar	Shelburne	80	Enos Churchill.	Lockeport	12	105 00
54,114	Lone Star	Halifax	29	C. Locke & Co.	do	8	41 09
94,639	Libbie.	Shelburne	80	John A. McGowan.	Shelburne	15	120 00
75,550	Martino	Barrington.	11	Theodore Nickerson.	Shag Harbour	2	16 50
88,271	Magellan Cloud.	Shelburne	20	E. Greenwood.	N. E. Harbour.	7	28 13
85,488	Mabel Somers.	do	80	Enos Churchill.	Lockeport	16	116 48
85,477	Myrtle	Barrington	80	D. V. Kenney	Cape Island	14	116 00
83,256	Marquis of Lorne.	Annapolis	26	Churchill Locke.	Lockeport	6	34 14
74,301	Minnihaha.	Barrington	13	S. Countaway	CapeSable Island	5	19 50
88,583	Mary O'Dell	Yarmouth	14	John Sholes	Bear Point.	4	18 90
55,830	Oregon	Shelburne	20	Jno. C. McGray.	CapeSable Island	4	30 00
96,962	Sunrise	do	18	James B. Locke	Jordan Bay.	4	21 22
90,431	Swan	Barrington	10	Geo. Smith.	Port La Tour.	2	11 26
90,690	Sandalphon	Shelburne	80	C. Locke & Co.	Lockeport	19	120 00
85,483	Sarah H. Seeton.	do	80	do	do	19	120 00
96,961	Tivoli.	do	24	Robt. J. Swansbury.	Little Harbour.	6	33 43
85,542	Three Bells.	do	80	Sephorus Thorburn.	Jordan River	16	120 00
90,430	Will Carleton	Barrington	80	Geo. L. Nickerson	Port La Tour.	15	116 25
77,744	Whip-poor-will.	Shelburne	15	Jno. Harding	Ragged Island.	6	22 50
85,487	Willie McGowan.	do	80	Jno. A. McGowan.	Shelburne	21	120 00
85,541	Willie M.	Yarmouth	24	Isaac Kendrick.	Shag Harbour	9	36 00



DETAILED STATEMENT of Fishing Bounties paid to Vessels, &c.—Nova Scotia—*Con.*

## YARMOUTH COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew.	Amount of Bounty Paid.
							\$ cts.
80,647	Annie M. Bell....	Yarmouth.....	64	James Amiro.....	West Pubnico..	20	96 00
75,733	Alfred.....	do.....	46	Parker, Eakins & Co..	Yarmouth.....	13	66 54
94,980	Aurore.....	do.....	80	Leon D'Eon.....	Pubnico.....	20	120 00
71,030	Arizona.....	do.....	80	Syl. D. D'Entremont..	West Pubnico..	18	116 85
80,627	Annie D.....	do.....	71	Arch. C. D'Entremont	Pubnico.....	14	90 54
85,549	Byron.....	do.....	80	Byron Hines.....	East Pubnico..	18	120 00
97,028	Bertha.....	do.....	10	J. P. H. Eldridge.....	Yarmouth.....	1	9 38
80,605	Coral Leaf.....	do.....	71	Hervey Goodwin.....	Pubnico.....	18	106 50
85,536	Circassian.....	do.....	80	Jeremiah Gayton.....	Arygle.....	16	120 00
69,217	Chlorus.....	do.....	57	A. F. Stoneman & Co..	Yarmouth.....	13	75 46
94,977	Civilian.....	do.....	80	David L. Amiro.....	Pubnico.....	18	120 00
66,679	Diploma.....	do.....	80	Louis D'Eon.....	do.....	16	120 00
90,883	Donald Cann.....	do.....	80	H. B. Cann.....	Yarmouth.....	16	113 34
90,871	Dora.....	do.....	63	A. F. Stoneman & Co..	do.....	20	94 50
88,552	Edith A.....	do.....	80	Geo. D. D'Entremont..	Pubnico.....	14	120 00
80,646	Enma S.....	do.....	80	Geo. Bates.....	Yarmouth.....	16	120 00
85,551	Ethel.....	do.....	80	J. H. Porter & Co.....	Tusket Wedge..	18	120 00
90,654	Flora.....	do.....	64	David D'Entremont..	Pubnico.....	20	96 00
85,550	Fairplay.....	do.....	11	Anthony Sollons.....	Port Maitland..	3	14 44
90,885	Georgiana.....	do.....	80	Eli Leblanc.....	Tusket Wedge..	16	120 00
80,643	Hazel Dell.....	do.....	80	Parker, Eakins & Co..	Yarmouth.....	16	120 00
85,554	Hazel Glen.....	do.....	80	T. J. Perry.....	Arcadia.....	14	112 50
80,641	Jonathan.....	do.....	68	Chas. T. D'Entremont.	West Pubnico..	18	99 32
88,587	Jessie May.....	do.....	14	Arthur E. Allen.....	Pubnico.....	2	14 70
88,581	Kingfisher.....	do.....	47	A. F. Stoneman & Co..	Yarmouth.....	17	70 50
90,887	L'Etoile.....	do.....	47	J. H. Porter & Co.....	Tusket Wedge..	15	68 30
80,614	Louise.....	do.....	80	do.....	do.....	16	120 00
80,632	Lumen.....	do.....	30	do.....	do.....	7	45 00
90,888	Laura J.....	do.....	54	Chas. M. Boudreau...	do.....	18	81 00
80,624	Lima.....	do.....	12	H. & N. B. Lewis.....	Yarmouth.....	3	18 00
51,972	Lydia Ryder.....	do.....	57	Louis P. D'Entremont.	Pubnico.....	21	85 50
80,648	Maria.....	do.....	80	Byron Hines.....	East Pubnico..	17	116 66
88,596	M. A. Louis.....	do.....	64	Marc. A. Surette.....	Pubnico.....	20	96 00
61,510	Mansimalo.....	Shelburne.....	50	Isaac A. D'Entremont.	West Pubnico..	17	72 92
94,635	Mildred J. McLean	Yarmouth.....	80	H. B. Cann.....	Yarmouth.....	18	120 00
74,339	Maitland.....	do.....	44	H. & N. B. Lewis.....	do.....	16	66 00
97,024	Mary Amanda.....	do.....	42	Frank G. Harris.....	Sandford.....	5	54 00
85,533	Minnie C.....	do.....	12	Jacob E. Cann.....	Pubnico.....	4	18 00
85,539	Maggie Jane.....	do.....	12	Geo. Wyman.....	Sandford.....	3	13 50
97,022	M. & L. Chase.....	do.....	46	Chas. W. Bent.....	do.....	10	69 00
90,892	Nellie.....	do.....	59	J. H. Porter & Co.....	Tusket Wedge..	18	88 50
90,659	N. A. Laura.....	do.....	59	Julien D'Entremont..	West Pubnico..	20	88 50
85,553	Onyx.....	do.....	80	Parker, Eakins & Co..	Yarmouth.....	14	112 50
80,645	Opal.....	do.....	80	do.....	do.....	16	120 00
97,021	Onward.....	do.....	10	James M. Davis.....	do.....	7	50
80,628	Roseneath.....	do.....	80	Byron Hines.....	East Pubnico..	14	112 50
75,724	Sea Foam.....	do.....	75	J. H. Porter & Co.....	Tusket Wedge..	14	112 50
85,535	Sizefroi.....	do.....	40	do.....	do.....	10	60 00
88,589	Sandford.....	do.....	20	Abram Thurston.....	Sandford.....	3	22 50
90,894	Theresa.....	do.....	18	Hilaire Burque.....	Eel Brook.....	7	27 00
90,881	Tiger.....	do.....	57	G. G. Sanderson.....	Tusket.....	19	85 50
88,597	Uncle Sam.....	do.....	80	G. D. D'Entremont..	Pubnico.....	16	120 00
90,882	Will-o'-the-Wisp..	do.....	51	Ant. M. D'Entremont.	West Pubnico..	19	76 50
66,685	Wide Awake.....	do.....	77	A. F. Stoneman & Co..	Yarmouth.....	14	115 50
90,896	Wapiti.....	do.....	80	do.....	do.....	16	120 00
90,897	Wrasse.....	do.....	56	do.....	do.....	19	81 90

## DETAILED STATEMENT of Fishing Bounties paid to Vessels, &amp;c.—Continued.

## PROVINCE OF NEW BRUNSWICK.

## CHARLOTTE COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew.	Amount of Bounty Paid.
92,517	Ada .....	St. Andrew's ..	10	Wm. Philips. ....	Wilson's Beach..	2	15 00
98,270	Alice May .....	St. John. ....	10	J. & D. Wenn. ....	Mace's Bay .....	3	13 13
92,487	Alice Maud. ....	Windsor, N.S. ...	12	James Barry .....	Beaver Harbour.	3	18 00
93,478	Argyle .....	St. Andrew's ..	10	Joseph Murphy .....	La Tête .....	3	15 00
93,469	Austin P. ....	do .....	12	D. L. Richardson .....	Deer Island. ....	2	9 00
90,888	B. R. Stevenson ..	do .....	17	Randolph Langman ..	Campobello. ....	2	21 25
64,011	Bee .....	do .....	18	Nathaniel Sirls. ....	Wilson's Beach..	3	27 00
59,311	Blooming Rose. ....	do .....	19	Aaron Cook .....	Deer Island. ....	5	28 50
59,375	Cadet .....	do .....	19	Ethelbert Savage, M. O	Campobello. ....	3	28 50
80,409	Carrie .....	Digby, N.S. ....	12	James McLeese .....	Back Bay .....	2	18 00
98,387	Comet .....	Windsor, N.S. ...	10	Thomas Carter .....	Seeley's Cove. ....	3	15 00
35,338	Caroline .....	St. Andrew's ..	18	Henry Stuart .....	Deer Island. ....	3	27 00
92,503	Defiance .....	do .....	17	Frank Calder .....	Campobello. ....	3	25 50
92,515	Dispute .....	do .....	13	Melville Patch. ....	do .....	3	19 50
74,326	Dreadnought .....	Yarmouth, N.S.	19	Alfred Stanley, sen ..	North Head, Grand Manan.	4	25 65
98,253	E. B. Colwell. ....	St. John. ....	19	S. McKay & E. Wadling	Beaver Harbour.	3	22 80
92,516	Emma .....	St. Andrew's ..	22	Wm., Robt. & Jas. Shaw	Lepreaux. ....	4	33 00
90,882	Ella Mabel. ....	do .....	14	Daniel Calder .....	Campobello. ....	3	21 00
98,281	Eastern State .....	do .....	22	N. Dick & C. McMahon	La Tête .....	3	33 00
90,803	Exenia. ....	Windsor, N.S. ...	18	Wm. F. Parker .....	Beaver Harbour.	4	27 00
59,400	Foam Bell .....	St. Andrew's ..	10	Thomas Bright .....	Seeley's Cove. ....	3	15 00
98,276	Falcon .....	do .....	12	James Brown .....	Wilson's Beach..	4	18 00
92,511	Fleetwing .....	do .....	11	Addison Mathews. ....	White Head, Grand Manan.	2	16 50
59,393	Fannie. ....	do .....	12	James Greenlaw .....	Lord's Cove .....	3	15 75
77,963	Freeman Colgate. ....	do .....	26	Geo. English. ....	Deer Island. ....	5	35 75
92,508	Grey Eagle .....	do .....	13	Nehemiah Mitchell. ....	Campobello. ....	3	19 50
94,835	Georgie Linwood. ....	do .....	25	J. Hawkins <i>et al</i> .....	Beaver Harbour.	5	37 50
59,396	Gurtie Westbrooke ..	do .....	16	James Cline .....	Deer Island. ....	3	24 00
59,394	Hattie. ....	do .....	10	Chas. Harkins .....	Dipper Harbour.	3	15 00
75,587	Happy Return. ....	Weymouth, N.S.	13	Daniel Campbell. ....	do .....	3	19 50
80,650	Happy Home. ....	Yarmouth, N.S.	14	Michael Nodding .....	Beaver Harbour.	3	21 00
94,839	Harrie. ....	St. Andrew's ..	14	Howard Jackson .....	Campobello. ....	2	17 50
93,463	Havelock .....	do .....	33	Wm. James .....	do .....	4	44 55
51,965	John E. Dennis. ....	do .....	18	Alex. Simpson .....	do .....	3	27 60
83,472	Linden .....	do .....	12	Oliver G. Brown .....	Wilson's Beach..	2	18 00
88,407	Linnet. ....	Digby, N.S. ....	15	Alva Brown .....	do .....	3	22 50
77,965	Lydia B. ....	St. Andrew's ..	18	John M. Calder .....	Campobello. ....	3	27 00
59,395	Little Minnie. ....	do .....	11	Joseph McGee .....	Back Bay. ....	2	13 75
98,273	Lilian E. ....	do .....	13	Andrew McGee. ....	do .....	3	19 50
93,464	Little Annie .....	do .....	19	J. & I. Holmes .....	La Tête .....	4	28 50
59,388	Letitia. ....	do .....	10	George Lahey. ....	North Head, Grand Manan.	3	12 00
83,465	Look Out. ....	do .....	48	A. W. Ingersoll. ....	Grand Manan. ....	8	72 00
75,598	Lizzie Jane .....	Digby, N.S. ....	18	Chas. A. Green. ....	Deer Island. ....	3	27 00
59,356	M. P. Reed. ....	Annapolis, N.S.	30	A. T. & H. Craft .....	Mace's Bay .....	5	45 00
88,277	Maggie Jane. ....	St. John. ....	18	F. & G. Campbell .....	Dipper Harbour.	5	27 00
92,514	Maggie Jane. ....	St. Andrew's ..	10	Victoria Cook .....	Back Bay. ....	3	12 00
77,970	Mary Emeline. ....	do .....	18	Calvados Brown .....	Wilson's Beach..	3	27 00
55,828	Minnie Ha ! Ha ! ..	Shelburne, N.S.	19	Geo. R. Batson. ....	Campobello. ....	2	21 38
85,442	Mystery .....	Windsor, N.S. ...	14	E. A. & S. Munroe. ....	Beaver Harbour.	3	21 00
59,326	Maud Holmes .....	St. Andrew's ..	21	Jacob Cook. ....	North Head, Grand Manan.	5	31 50
94,833	News Boy. ....	do .....	16	Ernest Lank .....	Wilson's Beach..	3	21 00
77,967	Naomi. ....	do .....	14	Wm. James .....	Campobello. ....	3	21 00
75,716	Onward .....	Yarmouth, N.S.	11	John Watt .....	North Head, Gd. Manan.	2	16 50



## DETAILED STATEMENT of Fishing Bounties paid Vessels, &amp;c.—New Brunswick—Con.

## CHARLOTTE COUNTY—Concluded.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew.	Amount of Bounty Paid.
94,837	Olga .....	St. Andrews....	11	Lincoln Richardson ...	Deer Island ....	3	\$ cts.
59,383	Pilgrim's Progress.	do .....	16	Judson E. Porter ...	Wilson's Beach ..	3	16 50
92,518	Peril .....	do .....	18	M. Eldridge & G. Dickson	Beaver Harbour.	3	24 00
75,591	Rise and Go ....	do .....	16	Wm. Sirls .....	Wilson's Beach ..	3	27 00
75,547	River Rose .....	Barrington, N.S.	13	Lewis E. Calder .....	Campbell's .....	3	24 00
59,357	Silver Bell .....	St. Andrews....	13	John Mallock .....	Wilson's Beach..	3	19 50
88,287	Satellite .....	do .....	26	M. Eldridge & E. Wadlin	Beaver Harbour.	5	39 00
59,347	Sea Gull .....	Annapolis, N.S.	20	S. L. Justason .....	Pennfield .....	3	30 00
88,272	Simeon H. Bell...	St. Andrews....	14	Charles Dixon .....	North Head, Gd. Manan .....	3	16 80
88,284	Sea Foam .....	do .....	13	Geo. Moses .....	Indian Island ..	1	13 00
59,387	Telephone .....	do .....	19	Joseph McGee .....	Back Bay .....	1	16 63
88,414	Trumpet .....	St. John .....	20	Geo. U. Wright .....	Beaver Harbour.	3	30 00
92,504	Tiger .....	St. Andrews....	15	James Nesbett .....	North Head, Gd. Manan .....	3	22 50
94,832	Venus .....	do .....	42	Simon Brown .....	Wilson's Beach..	6	63 00
88,282	Veritas .....	do .....	10	Chas. Mathews .....	Le Tête .....	3	15 00
83,468	Village Bell ..	do .....	15	Allen P. Dixon .....	North Head, Gd. Manan .....	2	22 50
77,969	Wave Queen .....	do .....	11	Wm. McMahon .....	Le Tête .....	2	13 75
92,512	Water Witch .....	do .....	11	B. H. Cosseboom .....	White Head, Gd. Manan .....	2	12 38

## GLOUCESTER COUNTY.

72,099	Adelina .....	Chatham .....	12	Auguste Poulin .....	Lamèque .....	4	18 00
92,419	Anna .....	do .....	12	D. Chiasson .....	Shippegan .....	3	18 00
96,739	Angeline .....	do .....	14	Octave Gionet .....	Caraget .....	3	21 00
61,431	Bee .....	Miramichi .....	11	Paul Noël .....	Shippegan .....	3	16 50
72,079	Betsy .....	Chatham .....	13	Sebastien Noël .....	Lamèque .....	3	19 50
96,725	Bessie T. ....	do .....	10	Colin C. Turner .....	Tracadie .....	3	15 00
96,730	Christina .....	do .....	11	Chas. DeGruchey .....	Caraget .....	3	16 50
92,412	Dollie Dutton ..	do .....	13	Richard Young .....	Shippegan .....	3	17 07
96,723	Emma .....	do .....	15	Ludger Duguay .....	do .....	3	22 50
61,446	Esperance .....	do .....	10	Auguste Noël .....	do .....	3	15 00
96,737	Elmina .....	do .....	11	Jacques Noël .....	do .....	3	16 50
92,417	Evangeline .....	do .....	11	Richard Young .....	do .....	5	16 50
61,437	Flying Fish .....	do .....	11	Elie Chiasson .....	Lamèque .....	3	16 50
61,445	Flavie .....	do .....	13	Theophile Duguay ..	Shippegan .....	3	19 50
96,736	Fly .....	do .....	14	Richard Young .....	do .....	4	21 00
85,699	Four Sisters .....	do .....	10	Marcel Caron .....	Caraget .....	3	15 00
96,733	Gem .....	do .....	12	Richard Young .....	Shippegan .....	4	18 00
92,418	Grip .....	do .....	12	James Davidson .....	Tracadie .....	4	18 00
61,425	Hope .....	do .....	13	C. Robin & Co. (limited)	Caraget .....	4	19 50
96,724	Isabel .....	do .....	11	Pierre Noël .....	Lamèque .....	3	16 50
92,403	Maria .....	Miramichi .....	25	Ubalde Landry, sen.	Grande Anse ..	4	37 50
85,692	Mary .....	Chatham .....	11	J. N. LeBontillier ..	Caraget .....	3	16 50
72,100	Marie .....	do .....	11	Onesime Chiasson ..	Shippegan .....	3	16 50
61,442	Marie Cécile .....	do .....	15	Olivier Duguay .....	Lamèque .....	4	22 50
92,420	Mary Louise .....	do .....	13	Wm. LeBreton .....	Pokemonche .....	3	19 50
33,652	Marie Louise .....	New Carlisle, Q.	16	Napoleon Roy .....	Petit Rocher ..	3	24 00
92,413	Mary Jane .....	Chatham .....	14	Theodore Savry .....	Tracadie .....	3	18 38
88,669	Morning Star .....	do .....	12	Gustave Gionet .....	Pokemonche .....	2	15 00
61,447	Merida .....	do .....	13	André Aché .....	Lamèque .....	3	19 50
96,732	Providence .....	Chatham .....	11	D. Chiasson .....	Shippegan .....	3	16 50
72,076	Providence .....	Miramichi .....	12	Eutrope Duguay .....	do .....	3	18 00
96,729	Ryse .....	Chatham .....	11	Jeremie Ache .....	Lamèque .....	3	16 50
61,438	Rosane .....	do .....	13	Thomas Ahier .....	Shippegan .....	5	19 50



DETAILED STATEMENT of Fishery Bounties paid to Vessels, &c.—New Brunswick—  
Continued.

GLOUCESTER COUNTY.—Concluded.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew.	Amount of Bounty Paid.
41,568	Ranger .....	Gaspé, Que. ....	42	Joseph Poirier, M.O. .	Grande Anse. . .	4	\$ 56 70
61,406	Reward .....	Miramichi. ....	11	J. N. LeBoutillier. . .	Caraget. ....	3	16 50
74,401	Sara .....	Chatham. ....	11	Nazaire Noël. ....	Lamèque. . .	3	16 50
96,731	Sea Star .....	do .....	13	Joseph M. Savoy. ....	Shippeaan. ....	4	19 50
92,408	Sarah A. W. ....	do .....	15	Robt. J. Wilson. ....	do .....	3	22 50
96,738	Three Brothers. . .	do .....	12	James Godin, sen. ....	Shippegan Is'd. .	4	18 00
72,091	Whitewing. ....	do .....	19	Eugène Robichaud. ....	Shippegan. ....	6	28 50
96,735	White Fish. ....	do .....	12	Joseph J. Savoy. ....	do .....	3	18 00

KENT COUNTY.

83,105	Katie Bell. ....	Richibucto. ....	11	Jno. Bell. ....	Richibucto. ....	3	16 50
83,104	Minnie Long. ....	do .....	20	Wm. Long. ....	do .....	2	30 00
61,411	Telegraph. ....	do .....	20	Frank Hawes. ....	Kingston. ....	4	30 00

NORTHUMBERLAND COUNTY.

75,904	Empress. ....	Chatham. ....	26	Robt. R. Call. ....	Chatham. ....	4	35 10
75,891	May Queen. ....	do .....	23	do .....	do .....	4	28 76
61,373	Maria. ....	Miramichi. ....	28	Wm. S. Loggie & G. D. Lewis. ....	do .....	7	35 70
74,368	Maggie Roach. ....	Chatham. ....	44	Wm. S. Loggie. ....	do .....	4	46 20
78,044	Princess Louise. . .	do .....	21	Robt. R. Call. ....	do .....	5	31 50
75,895	Two Brothers. ....	do .....	26	do .....	do .....	7	39 00

ST. JOHN COUNTY.

72,192	Ada .....	St. John. ....	19	J. K. Ferguson <i>et al.</i> .	Pisarinco. ....	4	28 50
80,093	Anna K. ....	do .....	14	Wm. Spence. ....	St. John, North. .	3	21 00
74,308	Bald Eagle. ....	Yarmouth, N.S. .	14	James Wilson. ....	do .....	3	21 00
85,972	Dove. ....	St. John. ....	11	Saml. Maguire, sen. .	Musquash. ....	3	16 50
83,259	Hettie May. ....	Annapolis, N.S. .	15	John Butler. ....	do .....	5	22 50
57,181	Hattie. ....	Windsor, N.S. .	13	S. & J. J. Galbraith. .	Pisarinco. ....	4	19 50
88,261	Little Joe. ....	St. John. ....	18	Joseph O'Brien. ....	St. John, West. .	4	27 00
52,159	Mary E. ....	do .....	21	Fredk. Buchanan. ....	do .....	4	31 50
50,322	Sea Flower. ....	do .....	11	James Thompson. ....	Musquash. ....	3	16 50
72,973	Sea Breeze. ....	Digby, N.S. ....	13	D. Tolan & J. Graham. .	do .....	5	19 50
59,156	Tom. ....	St. John. ....	14	James Boyle. ....	do .....	3	21 00
88,264	Walter J. Clarke. .	do .....	20	Geo. H. McAuley. ....	Carleton. ....	3	30 00

DETAILED STATEMENT of Fishing Bounties paid to Vessels, &c.—*Continued.*

## PROVINCE OF PRINCE EDWARD ISLAND.

## KING'S COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew.	Amount of Bounty Paid.
66,428	Albert..	Charlottetown..	40	James Herring...	Murray Harbour	7	\$ 56 25
69,132	Belle of the Bay...	Guysboro', N.S..	20	Mathew Gosbee...	do ..	5	30 00
74,141	Belle.....	do	31	Alex. Jackson ..	do ..	8	46 50
83,196	Ethel Blanche...	Pictou, N.S.....	17	Reuben Cahoon....	do ..	4	25 50
71,412	Emerald .....	Charlottetown..	25	James Burke .....	Georgetown.....	6	32 80
88,644	Hattie.....	do	18	Henry Dicks .....	Murray Harbour	4	27 00
92,458	Jubilee.....	do	76	Malcolm McDonald..	Georgetown. . .	12	99 72
75,882	Lord McDonald..	do	15	David Cahoon .....	Murray Harbour	3	22 50
83,095	Mary Margaret...	Pt. Hawkesbury.	17	John Cahoon .....	do ..	4	25 50
80,937	Montague .....	Charlottetown..	16	Michael Jackson....	do ..	4	24 00
90,639	Morell.....	do	16	Edward Delorey....	Brudenell.....	1	14 00
69,109	Marcella Butler..	do	38	John Hemphill .....	Georgetown.....	10	57 00
92,469	Nutwood.....	do	80	John McLean.....	Souris .....	15	112 94
88,350	Orion.....	do	78	A. O. Cogswell .....	Georgetown.....	16	117 00
90,488	Wave.....	do	19	James Delorey....	Brudenell.....	4	22 38

## PRINCE COUNTY.

72,081	Annie ..	Chatham, N.B..	13	John McDonald .....	Campbellton....	3	19 50
71,310	Black Watch .....	Charlottetown..	23	Benjamin Perry....	Kildare.....	6	34 50
64,867	Daring..	do	38	Walter Matheson....	Campbellton....	3	35 07
88,642	Express .....	do	46	John Champion.....	Alberton .....	13	69 00
55,829	Emma McMillan..	Pictou, N.S.....	20	John Coughlan .....	Campbellton....	3	30 00
66,948	Lois .....	Charlottetown..	66	John A. Matheson....	do ..	10	99 00
59,663	Lettie ..	do	57	J. H. Myrick & Co....	Tignish.....	13	82 44
92,455	Mikado.....	do	38	Terrence Farrell....	Alberton .....	6	52 92
77,619	Milford Guy..	do	60	James S. Gordon....	do ..	12	90 00
74,155	Maggie McBeth..	do	26	J. P. Thompson .....	Campbellton....	4	39 00
72,087	Spy .....	do	18	Mrs. E. K. Brennan ..	Alberton .....	3	27 00
83,096	St. Patrick.....	Pt. Hawkesbury.	11	John White .....	Cascumpec .....	5	16 50
83,089	St. Peter.....	Pictou, N.S.....	16	Edwin Gillis .....	Tignish .....	4	24 00
96,926	Sea Foam .....	Charlottetown..	15	Wm. G. Ramsay.....	Malpèque.....	3	15 00

## QUEEN'S COUNTY.

92,464	Eliza M.....	Charlottetown..	17	Wm. Bell.....	New London....	1	15 30
92,466	G. H. Gardiner...	do	17	J. H. Pursey.....	Rustico.....	5	25 50
71,334	Watchman .....	Barrington, N.S.	15	H. M. Churchill .....	Charlottetown..	8	22 50

DETAILED STATEMENT of Fishing Bounties paid to Vessels, &c.—*Concluded.*

## PROVINCE OF QUEBEC.

## BONAVENTURE COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew.	Amount of Bounty Paid.
							\$ cts.
70,715	Anna.....	New Carlisle....	10	Wm. Buttle.....	New Carlisle ...	2	11 26
90,613	Julia Ann.....	Moncton, N.B.	27	C. Babin & C. Bufold.	Bonaventure....	4	40 50

## GASPÉ COUNTY.

73,495	Canadienne.....	Halifax, N.S....	53	J. N. Arseneau.....	Grindstone. ....	10	70 35
71,357	Emma Gidney....	do .....	47	Damien Devaux.....	Aubert. ....	11	70 50
77,604	E. D. Myra.....	Lunenburg, N.S.	43	P. P. Delaney .....	House Harbour.	7	54 81
73,029	F. P. T. ....	Magdalen Islan's	41	Camille Delaney .....	do .....	11	58 93
85,393	Formosa.....	do .....	43	P. P. Delaney .....	do .....	10	59 12
73,025	Marie Euphrosyne	do .....	39	John Binet. ....	Etang du Nord.	7	46 30
75,449	Marie Louise.....	Gaspé. ....	11	Alfred Legouvie.....	Sandy Beach....	2	16 50

## SAGUENAY COUNTY.

57,742	Acara.....	Halifax, N.S....	30	Fred. Jomphe .....	Esquimaux Pt..	7	45 00
42,436	Amelia.....	Gaspé. ....	50	P. Cormier & Bros....	do .....	9	75 00
74,270	Amarilda.....	Quebec. ....	24	L. Pineau.....	Bic... ..	2	36 00
59,468	Busy.....	do .....	38	Vigneaux & Blais. ....	Esquimaux Pt..	8	57 00
83,370	C. M. G. P. ....	do .....	46	N. Picard.....	do .....	7	69 00
61,966	D. Cronan.....	Halifax, N.S....	40	P. Lemarquand .....	do .....	8	60 00
66,028	Emerillon.....	Quebec. ....	13	Joseph Demeule .....	Quebec. ....	2	16 25
59,909	Elizabeth.....	do .....	27	Luc Cormier.....	Esquimaux Pt..	8	40 50
85,459	Florida.....	do .....	13	Wm. Michaud .....	Isle Verte.....	2	19 50
75,679	Gleaner.....	do .....	41	S. Landry & Bros....	Esquimaux Pt..	7	61 50
85,750	H. B.....	do .....	57	H. Boudreau .....	do .....	7	85 50
85,753	Java.....	do .....	46	Dom. Cormier.....	do .....	8	59 58
77,868	Leodore.....	do .....	38	Turgeon & Corriveau.	do .....	7	57 00
42,435	Labrador.....	Gaspé. ....	43	Placide Doyle.....	do .....	7	64 50
55,869	Marie Adelmina..	Quebec. ....	13	C. Levesque.....	Isle Verte.....	3	19 50
69,584	Marie Louise.....	do .....	23	Pierre Ouellette.....	Quebec. ....	4	34 50
55,912	do .....	do .....	13	A. Létourneau .....	do .....	4	19 50
69,380	Marie Anne.....	Gaspé. ....	35	E. Landry & Sons....	Esquimaux Pt..	9	49 87
42,434	Marguerite.....	do .....	27	Michel Giasson.....	do .....	5	40 50
69,382	Marie du Sacré Cœur.....	do .....	46	Turbis, Briand & Landry.	do .....	7	69 00
42,437	Progress.....	do .....	52	E. Leblanc <i>et al.</i> .....	do .....	7	78 00
83,360	Ste. Anne.....	Quebec. ....	13	Pierre Fraser.....	N.D. Isle Verte.	3	19 50
75,680	Sea Star.....	do .....	52	Jude Poirier.....	Betchouan.....	8	78 00
80,753	Stella Maris .....	do .....	51	L. Cummings & Bros.	Esquimaux Pt..	9	76 50
69,591	Ste. Marie.....	do .....	37	Alex. Scherrer .....	do .....	7	55 50



The following Vessel claims for 1889, held in abeyance, were paid in 1890-91.

PROVINCE OF NOVA SCOTIA.

DIGBY COUNTY.

Official Number.	Name of Vessel.	Port of Registry.	Tonnage.	Name of Owner or Managing Owner.	Residence.	No. of Crew.	Amount of Bounty Paid.
88,584	Index.....	Yarmouth.....	17	Nathaniel Allan .....	Richmond.....	4	\$ cts. 25 50

HALIFAX COUNTY.

55,836	Frank Newton....	Sydney.....	40	Theo. Conrod.....	Sheet Harbour..	9	60 00
46,498	Mariner.....	Halifax.....	56	Wm. C. & J.H. Henley	Spry Bay.....	8	79 33
41,787	Silver Dart.....	do .....	30	John Hutt.....	Tangier.....	6	41 78

## COMPARATIVE STATEMENT of Fishing Bounties Paid, from 1882 to 1890 inclusive.

Number.	Province.	County.	1882.			1883.			1884.			Number.
			Vessels.	Boats.	Total.	Vessels.	Boats.	Total.	Vessels.	Boats.	Total.	
1	Nova Scotia.....	Annapolis.....	472 00	1,998 00	2,470 00	838 00	1,207 50	2,045 50	648 00	1,503 50	2,151 50	1
2		Antigonish.....		840 00	840 00		482 50	482 50		739 50	739 50	2
3		Cape Breton.....	294 00	5,167 00	5,461 00	436 00	2,853 50	3,289 50	383 00	3,909 00	4,292 00	3
4		Colchester.....							64 00		64 00	4
5		Cumberland.....		20 00	20 00					7 50	7 50	5
6		Digby.....	1,436 00	4,118 66	5,554 66	2,632 00	2,182 50	4,834 50	3,322 84	2,234 50	5,557 34	6
7		Guysboro'.....	2,380 73	7,913 75	10,294 48	2,914 00	4,645 00	7,559 00	3,371 90	6,485 50	9,857 40	7
8		Halifax.....	3,599 50	11,118 31	14,717 81	6,020 00	6,080 50	12,100 50	5,834 00	7,898 00	13,732 00	8
9		Iverness.....	950 00	5,432 00	6,382 00	572 00	3,422 50	3,994 50	1,208 00	4,522 00	5,730 00	9
10		King's.....	46 00	125 00	171 00	146 00	157 50	303 50	196 00	70 50	266 50	10
11		Lunenburg.....	15,161 63	3,112 00	18,273 63	17,638 00	1,850 00	19,508 00	19,648 24	3,162 00	22,810 24	11
12		Pictou.....	202 00	95 00	297 00	202 00	120 00	322 00	177 76	107 50	285 26	12
13		Queen's.....	1,638 00	7,917 00	9,555 00	1,826 00	810 00	2,636 00	2,408 00	836 50	3,244 50	13
14		Richmond.....	3,853 15	7,998 50	11,851 65	3,558 00	4,225 00	7,783 00	3,266 58	6,325 00	9,591 58	14
15		Shelburne.....	7,294 00	4,332 00	11,626 00	8,744 00	2,326 50	11,070 50	8,928 27	2,781 50	11,709 77	15
16		Victoria.....	284 00	4,861 00	5,145 00	492 00	2,830 50	3,322 50	60 00	4,045 50	4,105 50	16
17		Yarmouth.....	7,825 69	1,615 00	9,440 69	9,486 00	695 00	10,181 00	9,758 00	971 50	10,729 50	17
18	Totals.....		45,435 50	60,663 22	106,098 72	55,544 00	33,888 50	89,432 50	59,274 59	45,659 50	104,934 09	18
19	New Brunswick.....	Charlotte.....	2,140 00	5,641 00	7,781 00	2,380 00	2,830 00	5,210 00	2,792 00	3,035 00	5,827 00	19
20		Gloucester.....	422 00	5,368 00	5,790 00	492 00	3,968 50	4,060 50	508 00	4,739 00	5,307 00	20
21		Kent.....	768 00	965 00	1,733 00	266 00	1,197 50	1,463 50	246 00	764 50	1,010 50	21
22		Northumberland.....		45 00	45 00	68 00	52 50	120 50	66 00	68 00	134 00	22
23		Restigouche.....	28 00		28 00	52 00		52 00				23
24		St. John.....	984 00	591 00	1,575 00	861 20	587 50	1,448 70	956 00	260 00	1,216 00	24
25		Westmoreland.....		45 00	45 00		40 00	40 00		81 50	81 50	25
26		Totals.....		4,342 00	12,655 00	16,997 00	4,119 20	8,276 00	12,395 20	4,568 00	9,008 00	13,576 00

COMPARATIVE STATEMENT of Fishing Bounties Paid, from 1882 to 1890, inclusive.

Number.	Province.	County.	1882.			1883.			1884.			Number.			
			Vessels.	Boats.		Total.	Vessels.	Boats.		Total.	Vessels.		Boats.		Total.
				Amount.	\$			cts.	Amount.				\$	cts.	
27	P. E. Island .....	King's .....	252 00	5,024 00	5,276 00	293 14	2,790 50	3,083 64	475 44	3,028 00	3,503 44	27			
28	Prince .....	Prince .....	316 00	6,709 00	7,025 00	418 00	3,429 50	3,847 50	520 00	3,642 00	4,162 00	28			
29	Queen's .....	Queen's .....	210 00	3,626 00	3,836 00	96 00	1,550 00	1,646 00	65 02	1,473 50	1,538 52	29			
30	Totals .....	Totals .....	778 00	15,359 00	16,137 00	807 14	7,770 00	8,577 14	1,060 46	8,143 50	9,203 96	30			
31	Quebec ..	Bonaventure .....	.....	8,945 00	8,945 00	.....	3,846 50	3,846 50	.....	5,508 00	5,508 00	31			
32	Gaspé ..	Gaspé .....	2,070 00	17,899 75	19,969 75	2,152 00	9,302 50	11,454 50	1,906 00	13,879 50	15,785 50	32			
33	Rimouski ..	Rimouski .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	33			
34	Saguenay ..	Saguenay .....	2,350 00	1,773 00	4,123 00	2,320 01	2,319 00	4,639 01	2,023 09	4,687 50	6,711 43	34			
35	Temiscouata ..	Temiscouata .....	.....	15 00	15 00	.....	.....	.....	.....	.....	.....	35			
36	Totals ..	Totals ..	4,420 00	28,632 75	33,052 75	4,472 01	15,468 00	19,940 01	3,929 93	24,075 00	28,004 93	36			
RECAPITULATION.															
37	Nova Scotia .....	.....	45,435 50	60,663 22	106,098 72	55,544 00	33,888 50	89,432 50	59,274 59	45,659 50	104,934 09	37			
38	New Brunswick ..	.....	4,342 00	12,655 00	16,997 00	4,119 20	8,276 00	12,395 20	4,568 00	9,008 00	13,576 00	38			
39	P. E. Island .....	.....	778 00	15,359 00	16,137 00	807 14	7,770 00	8,577 14	1,060 46	8,143 50	9,203 96	39			
40	Quebec .....	.....	4,420 00	28,632 75	33,052 75	4,472 01	15,468 00	19,940 01	3,929 93	24,075 00	28,004 93	40			
41	Totals .....	Totals .....	54,975 50	117,309 97	172,285 47	64,942 35	65,402 50	130,344 85	68,832 98	86,886 00	155,718 98	41			



## COMPARATIVE STATEMENT of Fishing

Number.	1885.			1886.			1887.		
	Vessels.	Boats.	Total.	Vessels.	Boats.	Total.	Vessels.	Boats.	Total.
	Amount.	Amount.		Amount.	Amount.		Amount.	Amount.	
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1	430 08	1,180 00	1,610 08	431 60	1,063 50	1,495 10	305 27	1,162 00	1,467 27
2	.....	982 50	982 50	.....	832 00	832 00	.....	924 50	924 50
3	210 00	4,012 50	4,222 50	392 00	3,765 00	4,157 00	374 14	3,600 00	3,974 14
4	74 00	.....	74 00	74 00	.....	74 00	74 00	.....	74 00
5	.....	.....	.....	.....	.....	.....	.....	.....	.....
6	3,036 02	1,993 00	5,029 02	2,131 79	1,924 50	4,056 29	2,671 34	1,582 50	4,253 84
7	3,312 53	7,129 50	10,442 03	2,936 90	7,521 00	10,457 90	2,210 58	7,963 50	10,174 08
8	5,984 77	8,398 00	14,382 77	4,947 02	8,200 50	13,147 52	5,097 61	8,333 50	13,431 11
9	844 00	4,913 50	5,797 50	1,294 12	5,265 00	6,559 12	1,582 88	5,091 00	6,673 88
10	54 00	185 50	239 50	96 00	297 50	393 50	218 00	242 00	460 00
11	17,315 34	2,947 00	20,262 34	16,755 64	3,122 00	19,877 64	16,154 33	3,751 50	19,905 83
12	154 00	132 00	286 00	156 00	94 50	250 50	.....	130 00	130 00
13	1,854 00	1,190 50	3,044 50	1,814 60	957 00	2,781 00	1,650 00	1,212 50	2,862 50
14	3,164 49	7,046 00	10,210 49	2,650 00	6,941 00	9,591 00	2,762 86	7,704 00	10,466 86
15	9,198 00	3,201 50	12,399 50	7,880 67	3,072 00	10,952 67	6,678 62	3,687 00	10,365 62
16	166 00	4,487 00	4,653 00	222 20	4,599 50	4,821 70	88 00	4,600 50	4,688 50
17	9,415 50	968 50	10,384 00	8,513 60	829 00	9,342 60	8,539 40	1,230 50	9,769 90
18	55,252 73	48,767 00	104,019 73	50,295 54	48,494 00	98,789 54	48,407 03	51,215 00	99,622 03
19	2,508 25	3,937 00	6,445 25	2,579 67	4,246 00	6,825 67	3,292 65	4,681 50	7,974 15
20	452 00	5,876 00	6,328 00	516 00	6,462 00	6,978 00	618 75	7,136 00	7,754 75
21	184 00	1,309 50	1,493 50	206 00	1,473 50	1,679 50	370 00	1,728 50	2,098 50
22	180 00	80 50	260 50	592 00	80 50	672 50	445 00	229 00	674 00
23	.....	.....	.....	28 00	7 00	35 00	.....	.....	.....
24	902 00	367 50	1,269 50	1,054 40	424 00	1,478 40	786 25	291 00	1,077 25
25	.....	111 50	111 50	.....	225 50	225 50	.....	121 00	121 00
26	4,226 25	11,682 00	15,908 25	4,976 07	12,918 50	17,894 57	5,512 65	14,187 00	19,699 65

Bounties Paid, from 1882 to 1890, Inclusive.

1888.			1889.			1890.			Grand Total.	Number.
Vessels.	Boats.	Total.	Vessels.	Boats.	Total.	Vessels.	Boats.	Total.		
Amount.	Amount.		Amount.	Amount.		Amount.	Amount.			
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.		
217 01	1,153 50	1,370 51	182 31	1,044 00	1,226 31	234 58	799 00	1,033 58	14,869 85	1
...	1,063 50	1,063 50	...	1,012 00	1,012 00	13 75	882 00	895 75	7,832 25	2
423 33	3,618 00	4,041 33	307 47	3,470 00	3,777 47	455 19	3,896 00	4,351 19	37,566 13	3
85 50	...	85 50	...	...	...	...	...	...	371 50	4
...	...	...	...	...	...	...	...	...	27 50	5
1,696 68	1,749 50	3,446 18	1,721 61	1,608 00	3,329 61	1,381 05	1,727 00	3,108 05	39,169 49	6
1,289 71	8,274 50	9,564 21	974 57	8,093 00	9,067 57	500 44	8,349 00	8,849 44	86,266 11	7
3,809 99	7,806 00	11,615 99	4,367 08	7,789 00	12,156 08	3,950 57	9,268 00	13,218 57	118,502 35	8
1,247 90	5,432 00	6,679 90	1,037 96	5,170 00	6,207 96	732 67	5,094 00	5,826 67	53,851 53	9
123 45	272 50	395 95	112 50	212 00	324 50	147 38	361 00	508 38	3,062 83	10
13,893 81	3,794 00	17,687 81	17,184 42	3,577 00	20,761 42	15,957 09	4,606 00	20,563 09	179,649 40	11
...	110 50	110 50	33 00	120 00	153 00	...	146 00	146 00	1,980 26	12
1,495 82	1,174 00	2,669 82	1,524 06	1,499 00	3,023 06	942 00	1,825 00	2,767 00	26,583 38	13
2,390 65	8,108 50	10,499 15	2,825 92	6,534 00	9,359 92	2,963 30	8,008 00	10,971 30	90,324 95	14
5,193 59	3,842 50	9,036 09	4,127 80	4,240 00	8,367 80	3,087 27	4,680 00	7,767 27	93,295 22	15
36 00	4,963 50	4,999 50	21 00	5,030 00	5,051 00	...	5,477 00	5,477 00	42,263 70	16
5,661 46	858 50	6,519 96	5,428 81	896 00	6,324 81	4,771 35	1 005 00	5,776 35	78,468 21	17
37,564 90	52,221 00	89,785 90	39,848 51	50,294 00	90,142 51	35,136 64	56,123 00	91,259 64	874,084 66	18
2,113 50	4,447 50	6,561 00	2,127 16	4,803 00	6,930 16	1,678 07	4,644 00	6,322 07	59,876 30	19
537 46	8,212 50	8,749 96	590 95	9,822 00	10,412 95	812 15	10,811 00	11,623 15	67,004 31	20
244 48	1,770 50	2,014 98	71 50	2,177 15	2,248 65	76 50	2,235 85	2,312 35	16,054 48	21
155 34	73 00	228 34	414 37	85 00	499 37	216 26	77 00	293 26	2,927 47	22
28 50	...	28 50	21 00	7 00	28 00	...	...	...	171 50	23
487 64	312 00	799 64	487 66	377 00	864 66	274 50	249 00	523 50	10,252 65	24
...	72 50	72 50	...	43 00	43 00	...	37 00	37 00	777 00	25
3,566 92	14,888 00	18,454 92	3,712 64	17,314 15	21,026 79	3,057 48	18,053 85	21,111 33	157,063 71	26

## COMPARATIVE STATEMENT of Fishing Bounties

Number.	1885.			1886.			1887.			
	Vessels.	Boats.	Total.	Vessels.	Boats.	Total.	Vessels.	Boats.	Total.	Vessels.
	Amount.	Amount.		Amount.	Amount.		Amount.	Amount.		Amount.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
27	626 15	4,090 50	4,716 65	770 44	4,149 50	4,919 94	1,225 78	4,396 00	5,621 78	654 06
28	426 00	3,552 50	3,978 50	967 40	3,413 00	4,380 40	1,127 00	3,636 00	4,763 00	782 00
29	76 00	1,433 50	1,509 50	271 53	1,364 00	1,635 53	734 73	1,409 00	2,143 73	180 90
30	1,128 15	9,076 50	10,204 65	2,009 37	8,926 50	10,935 87	3,087 51	9,441 00	12,528 51	1,616 96
31	.....	8,005 00	8,005 00	.....	9,294 00	9,294 00	.....	8,862 00	8,862 00	.....
32	1,524 26	14,900 50	16,424 76	1,176 98	15,465 50	16,642 48	1,233 98	15,335 25	16,569 23	1,098 05
33	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
34	1,988 00	5,047 00	7,035 00	2,227 63	5,119 50	7,347 13	2,354 00	4,122 50	6,476 50	1,573 20
35	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
36	3,512 26	27,952 50	31,464 76	3,404 61	29,879 00	33,283 61	3,587 98	28,319 75	31,907 73	2,671 25

## RECAPITU

37	55,252 73	48,767 00	104,019 73	50,295 54	48,494 00	98,789 54	48,407 03	51,215 00	99,622 03	37,564 90
38	4,226 25	11,682 00	15,908 25	4,976 07	12,918 50	17,894 57	5,512 65	14,187 00	10,699 65	3,566 92
39	1,128 15	9,076 50	10,204 65	2,009 37	8,926 50	10,935 87	3,087 51	9,441 00	12,528 51	1,616 96
40	3,512 26	27,952 50	31,464 76	3,404 61	29,879 00	33,283 61	3,587 98	28,319 75	31,907 73	2,671 25
41	64,119 39	97,478 00	161,597 39	60,685 59	100,218 00	160,903 59	60,595 17	103,162 75	163,757 92	45,420 03
	Less Refund..	58 00								Less
		161,539 39								



Paid, from 1882 to 1890, inclusive.

1888.		1889.			1890.			Grand Total.	Number.
Boats.	Total.	Vessels.	Boats.	Total.	Vessels.	Boats.	Total.		
Amount.		Amount.	Amount.		Amount.	Amount.			
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.		
2,067 00	2,721 06	1,043 02	6,672 00	7,715 02	713 09	4,837 00	5,550 09	43,017 62	27
3,826 50	4,608 50	651 25	4,114 00	4,765 25	633 93	3,941 00	4,574 93	42,105 08	28
1,582 50	1,763 40	69 26	1,445 00	1,514 26	63 30	1,498 00	1,561 30	17,148 24	29
7,476 00	9,092 96	1,763 53	12,231 00	13,994 53	1,410 32	10,276 00	11,686 32	102,360 94	30
9,891 50	9,891 50	.....	10,689 00	10,689 00	51 76	11,894 00	11,945 76	76,986 76	31
16,527 50	17,625 55	856 34	16,597 00	17,453 34	376 51	16,914 00	17,290 51	149,215 62	32
27 50	27 50	.....	160 00	160 00	.....	145 00	145 00	332 50	33
3,741 00	5,314 20	1,600 87	3,459 50	5,060 37	1,287 45	3,542 00	4,829 45	51,536 09	34
.....	.....	.....	.....	.....	.....	.....	.....	15 00	35
30,187 50	32,858 75	2,457 21	30,905 50	33,362 71	1,715 72	34,495 00	34,210 72	278,085 97	36

LATION.

52,221 00	89,785 90	39,848 51	50,294 00	90,142 51	35,136 64	56,123 00	91,259 64	874,084 66	37
14,888 00	18,454 92	3,712 64	17,314 15	21,026 79	3,057 48	18,053 85	21,111 33	157,063 71	38
7,476 00	9,092 96	1,763 53	12,231 00	13,994 53	1,410 32	10,276 00	11,686 32	102,360 94	39
30,187 50	32,858 75	2,457 21	30,905 50	33,362 71	1 715 72	32,495 00	34,210 72	278,085 97	40
104,772 50	150,192 53	47,781 89	110,744 65	158,526 54	41,320 16	116,947 85	158,268 01	1,411,595 28	41
Refund...	7 00				Less Refund.....		27 00	92 00	
	150,185 53						158,241 01	1,411,503 28	



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PART II

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REPORT

ON THE

FISHERIES PROTECTION SERVICE

OF

CANADA

1891

*PRINTED BY ORDER OF PARLIAMENT*



OTTAWA:

PRINTED BY S. E. DAWSON, PRINTER TO THE QUEEN'S MOST  
EXCELLENT MAJESTY.

1892





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TO THE

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1891.

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REPORT

ON THE

FISHERIES PROTECTION SERVICE

OF

CANADA

1891

BY LIEUT. ANDREW GORDON, R. N.

OTTAWA, 31st December, 1891.

The Hon. CHARLES H. TUPPER,  
Minister of Marine and Fisheries.

SIR,—I beg to report on the work of the Fisheries Protection Service under my command during the past season as follows:—

The vessels forming the fleet were as shown in the Table hereunder:

Vessel.	Officer Commanding.	Date of Commission.	Date paid off.
SS. Acadia.....	Lieut. Gordon, R.N.	June 1 .....	October 24.
La Canadienne.....	Com. Wakeham.....	do 2.....	November 26.
Stanley.....	Capt. Finlayson.....	do 18.....	September 11.
Dream.....	do Pratt .....	Jan. 1.....	November 30.
Schr. Vigilant .....	do Knowlton.....	May 10. ....	December .....
Agnes Macdonald..	do Kent.....	June 1 .....	October 15.
Prince Edward.....	do Rood .....	.....	And men from Acadia employed during part of lobster season, June 10 to July 10.
SS. St. Nicholas .....	do Pratt.....	Nov. 25 .....	December 31.

The " Acadia " was employed throughout the greater part of the season in the Gulf of St. Lawrence and on the coast of Cape Breton.

" La Canadienne " took her usual district on the Quebec shore and the northern gulf, and during the months of August and September was cruising off Miramichi Bay and west end of Prince Edward Island.

The " Stanley " was employed in the Gulf of St. Lawrence and on the Cape Breton coast, but was paid off on the 11th September at Halifax, going in the dock there for certain repairs.

The SS. " Dream " was employed in the Bay of Fundy up to the 30th November, when she was handed back to her owners, the charter having expired on notice given.

The SS. "St. Nicholas" was chartered on the 25th November to replace the "Dream," and was employed in the Bay of Fundy and on the north coast of Nova Scotia.

The "Vigilant" was principally employed on the Nova Scotian coast.

The "Agnes Macdonald" was built specially for the service by Mr. Joseph McGill, of Shelburne. She represents the newest type of fishing schooner and proved herself an exceptionally fast sailer. She was employed in the Gulf and on the Nova Scotian coast for the protection of the mackerel fishery.

The "Prince Edward" was officered and manned from the "Acadia," and was employed in Northumberland Straits in enforcing the provisions of the fisheries regulations in regard to lobsters.

In former reports I have drawn your attention to the advisability of retaining the services year after year of desirable officers of the force, and can add that each year's experience but strengthens my opinion on this point. It was, therefore, a matter of much satisfaction to me to be able to notify the officers under my command that a decision in their favour had been arrived at, and that they would be allowed half pay during the period that they were not employed on active duty. I feel sure that the liberality of the Government will be appreciated by these officers, and that as we shall now be able to retain the services of desirable and experienced men, great advantage will accrue to the service.

The scarcity of seamen at all the seaports in the Maritime Provinces raised the rate of wages in the spring so that we were compelled to pay an increased rate, A.B.'s getting nineteen dollars per month and ordinary seamen seventeen dollars for the season.

The desirability of retaining the services of experienced and reliable officers is readily admitted; but it is also of importance to retain the services of a certain number of the men who are familiar with the routine and with the discipline of the force; a few such men in each ship very soon leaven up the others and tend greatly to make things go smoothly. In my report for last year I recommended that A.B.'s be allowed to receive pay up to twenty dollars per month when they have been three years on the force, and I am still of opinion that the increase would be a most valuable aid to the working of the service.

#### SEIZURES.

The only seizure of a fishing vessel made during the season was that of the United States fishing schooner "F. D. Hodgkins," of Lemoine, Maine, a three-masted vessel of 169 tons. She was seized by Commander Wakeham, in the D. SS. "La Canadienne," for fishing in Fox Bay, at Anticosti. The master pleaded ignorance of the law, thinking he had the same rights off Anticosti as at the Magdalen Islands. Under the circumstances, the vessel was finally released on payment of a fine of two thousand dollars, and shipped a fresh crew for her homeward voyage. Capt. Pratt, in the D. SS. "Dream," also seized some small boats for fishing on Coffin's Ledge in Passamaquoddy Bay, but in consideration of the fact that the trespass might not have been intentional, the weather being thick at the time, the boats were all returned to their owners on their signing a release of all claims for damages.

#### LICENSES FOR FOREIGN FISHING VESSELS.

Parliament having sanctioned the continuance of the system of the issue of licenses commenced under the *modus vivendi* appended to the Treaty of Washington, 1888, similar licenses were issued for the year 1891, and the charge of one dollar and fifty cents per ton formerly made was continued unchanged. The following table gives a list of the vessels which took out these licenses during the year 1891.

SCHEDULE of United States Fishing Vessels to which Permits were issued under the Act entitled "An Act respecting Fishing Vessels of the United States of America," during the year 1891.

Name of Vessel.	Port of Registry.	Tons.	Port of Issue.	Fee.
				\$ cts.
Ella M. Doughty.....	Portland, Me.....	71	Lockeport, N.S.....	106 50
John W. Bray.....	Gloucester, Mass.....	79	Barrington.....	118 50
Laura Sayward.....	do.....	65	Port Mulgrave.....	97 50
Lucille.....	do.....	99	Shelburne.....	148 50
Electa A. Eaton.....	do.....	73	do.....	109 50
A. A. Duncan.....	do.....	83	do.....	124 50
Mascot.....	do.....	77	Liverpool.....	115 50
Samuel V. Colby.....	do.....	95	do.....	142 50
Spencer F. Baird.....	do.....	74	do.....	111 00
Nellie Dixon.....	Boston, Mass.....	106	Arichat.....	159 00
James and Ella.....	Gloucester, Mass.....	86	do.....	129 00
Hereward.....	do.....	85	Canso.....	127 50
Willie M. Stevens.....	do.....	73	do.....	109 50
Hattie Evelyn.....	do.....	66	Port Mulgrave.....	99 00
Penobscot.....	do.....	85	do.....	127 50
Abbie M. Deering.....	do.....	96	Arichat.....	144 00
Rigel.....	do.....	107	Port Hawkesbury.....	160 50
Mabel Kenniston.....	do.....	78	Liverpool.....	117 00
Iolanthe.....	do.....	71	do.....	106 50
Elsie N. Smith.....	do.....	106	North Sydney.....	159 00
Lizzie J. Greenleaf.....	do.....	88	do.....	132 00
Henry Longfellow.....	do.....	78	Liverpool.....	117 00
Bertha Nickerson.....	Booth Bay, Me.....	136	do.....	204 00
Addie Emma.....	Gloucester, Mass.....	35	Shelburne.....	52 50
Lucy W. Dyer.....	do.....	78	do.....	117 00
Golden Hind.....	do.....	70	Charlottetown, P.E.I.....	105 00
William Matheson.....	Provincetown.....	105	Arichat.....	157 50
Bertha May.....	Gloucester, Mass.....	75	Yarmouth.....	112 50
Carrie E. Parsons.....	do.....	80	Magdalen Islands.....	120 00
Eliza B. Campbell.....	do.....	95	North Sydney.....	142 50
Flora Dilloway.....	do.....	77	Canso.....	115 50
Ellen M. Adams.....	do.....	85	do.....	127 50
Gladiator.....	do.....	107	do.....	160 50
Lotta Bell.....	Provincetown.....	91	Arichat.....	136 50
Jesse T. Matheson.....	do.....	130	do.....	195 00
Marsdale.....	Gloucester, Mass.....	76	do.....	114 00
Porter J. Roberts.....	do.....	72	Yarmouth.....	108 00
Addie Winthrop.....	do.....	73	Liverpool.....	109 50
William H. Oakes.....	do.....	67	do.....	100 50
Gardner W. Tarr.....	do.....	62	Yarmouth.....	93 00
Susie Hooper.....	do.....	73	do.....	109 50
Knight Templar.....	do.....	70	Arichat.....	105 00
John G. Whittier.....	do.....	99	Yarmouth.....	148 50
Abbie Dodge.....	do.....	56	do.....	84 00
Annie L. Sanborn.....	do.....	33	Barrington.....	49 50
Jennie B. Thomas.....	do.....	48	do.....	72 00
Mystic.....	do.....	78	Canso.....	117 00
Laurance A. Munroe.....	do.....	110	do.....	165 00
Mabel Leighton.....	do.....	71	do.....	106 50
Gladstone.....	do.....	97	do.....	145 50
E. F. Williard.....	Portland, Me.....	55	Liverpool.....	82 50
Blanche.....	Gloucester, Mass.....	79	Arichat.....	118 50
Farragut.....	do.....	48	Barrington.....	72 00
Flash.....	do.....	69	Yarmouth.....	103 50
David Sherman.....	do.....	68	do.....	102 00
Ada R. Terry.....	do.....	65	do.....	97 50
Vesta.....	do.....	75	do.....	112 50
Enna E. Witherell.....	Boston, Mass.....	109	do.....	163 50
Willie A. Jewell.....	Provincetown.....	67	do.....	100 50
Conductor.....	Gloucester, Mass.....	70	Shelburne.....	105 00
Parthia.....	do.....	105	Yarmouth.....	157 50
Annie H. Mason.....	do.....	29	do.....	43 50
Horace B. Parker.....	do.....	93	Arichat.....	139 50
Charles W. Parker.....	do.....	54	Yarmouth.....	81 00
Mary Story.....	do.....	60	do.....	90 00



SCHEDULE of United States Fishing Vessels to which Permits were issued, &c.—*Con.*

Name of Vessel.	Port of Registry.	Tons.	Port of Issue.	Fee.
				\$ cts.
Daniel C. Baker.....	Salem, Mass.....	32	Yarmouth.....	48 00
New England.....	Gloucester, Mass.....	82	do.....	123 00
Octavia A. Dow.....	do.....	38	Barrington.....	57 00
D. A. Wilson.....	Beverly, Mass.....	87	Liverpool.....	130 50
Helen F. Fredick.....	Kennebunk, Me.....	37	do.....	55 50
Smuggler.....	Gloucester, Mass.....	64	Yarmouth.....	96 00
Augusta N. Johnston.....	do.....	62	St. Andrews, N.B.....	93 00
Alert.....	Portland, Me.....	24	Liverpool, N.S.....	36 00
Mary E. Daniels.....	Gloucester, Mass.....	64	do.....	96 00
Oceanus.....	do.....	45	Barrington.....	67 50
Ralph E. Eaton.....	do.....	66	Liverpool.....	99 00
Tubal Cain.....	do.....	60	do.....	90 00
Christie Campbell.....	do.....	52	Yarmouth.....	78 00
Fannie A. Spurling.....	do.....	81	do.....	121 50
Gertie Evelyn.....	do.....	81	Arichat.....	121 50
A. M. Burnham.....	do.....	60	Liverpool.....	90 00
Lizzie.....	do.....	68	Barrington.....	102 00
Rapid Transit.....	do.....	80	Yarmouth.....	120 00
Wenona.....	do.....	103	Liverpool.....	154 50
Annie Wesley.....	do.....	89	Yarmouth.....	133 50
Polar Wane.....	do.....	86	do.....	129 00
Eliza.....	Salem, Mass.....	44	do.....	66 00
Brunhilde.....	Gloucester, Mass.....	90	Shelburne.....	135 00
Henrietta.....	do.....	74	Liverpool.....	111 00
Albert Woodbury.....	Beverly, Mass.....	31	do.....	46 50
William H. Jordan.....	Gloucester, Mass.....	86	Lunenburg.....	129 00
Margaret Mather.....	do.....	91	Yarmouth.....	136 50
Edgar S. Foster.....	Salem, Mass.....	94	do.....	141 00
Nereid.....	Gloucester, Mass.....	92	Liverpool.....	138 00
Samuel R. Crane.....	do.....	74	North Sydney.....	111 00
Matthew Keany.....	do.....	66	Canso.....	99 00
A. T. Gifford.....	do.....	81	do.....	121 50
J. W. Campbell.....	do.....	79	do.....	118 50

## SUMMARY.

Total number of vessels.....	98
Total tonnage.....	7,399
Total amount received in fees.....	\$11,098 50

The conditions attending the issue of these licenses have, owing to the action of the Newfoundland Government, very materially changed during the past year. During the years 1888 and 1889 Newfoundland and Canada reciprocated with each other, licenses issued being good either in Canada or Newfoundland. In 1890, on the plea that United States schooners had been supplying bait to French vessels which they had obtained in Newfoundland, thus rendering the operation of the Bait Act nugatory, *i.e.*, the Newfoundland Government declined to continue the system under the *modus vivendi* adopting in the early part of the season a license system almost equivalent to prohibition. In 1891, however, the colonists have apparently both forgotten and forgiven the injuries said in 1890 to have been inflicted on their well-being by United States vessels, and while Canadian fishermen were absolutely prohibited from getting bait, and at the close of the season Canadian commercial vessels from buying cargoes of frozen herring as an article of trade, at this very time United States schooners were welcomed to their shores, given free bait licenses and allowed to sell their small fish in Newfoundland ports.

Privileges such as these formed a tempting bait, and it was anticipated early in the season that the bulk of the United States fishing fleet would use the Newfoundland

land shores as a base of operations for the season's work, thus avoiding the necessity of paying the license fee demanded by Canada.

The results however were as gratifying to Canada as they were unexpected, and the following statement shows that although the number of licenses issued was twenty-one less than that issued in 1890, it was still twenty in excess of the number issued in 1889, when Newfoundland and Canada were issuing reciprocal licenses.

1889—number issued.....	78—amount of fee.....	\$ 9,589 50
1890 do .....	119 do .....	14,461 50
1891 do .....	98 do .....	11,098 50

There has been in both the United States and Canada a steadily improving demand for fresh fish. This demand has been created by the increased facilities given by, and improved means of transportation of fish adopted by, the leading railway companies of both countries.

This demand will continue to increase; and as the shore fisheries of the United States are utterly inadequate as a base of supply, this fresh fish trade has been driven into decked vessels.

These vessels to be profitable have to make frequent trips and go home with smaller quantities of fish. They must therefore fish nearer home, and thus we find them scattered over George's Bank, Roseway, La Have, Brown's, and other shore banks of our Nova Scotia coast. During the summer they must have bait and ice, and thus Canada's geographical position is such that in order to successfully prosecute this business they must use our ports freely, and as they are unable to do this under the treaty of 1818 they take out licenses for the purpose of assisting them to successfully prosecute their calling. Whilst in no sense admitting that the license fee paid by United States vessels represents the full value to them of the commercial equivalent obtained, the system has proved successful to this extent, that it has in many cases lessened the friction which is unavoidable if the provisions of the treaty of 1818 are carried out rigorously.

Opinions still differ among Canadian fishermen as to the effect of the license system on their interest, many of the deep-sea fishermen contending that the licensed United States vessels compete with them for what has been lately a limited bait supply, and that they are otherwise greatly disadvantaged.

The shore fishermen and trap owners on the contrary consider that they are benefited by the competition of these men and get better prices for their bait fish in consequence of the system.

The number of licenses actually issued does not however show the extent to which our ports are made use of by United States fishing vessels. The appointment during the past summer of a special reporting officer at Sand Point, Shelburne county, has been fully justified, and has shown the necessity of paying special attention to the protection of the southern part of Nova Scotia. From 25th May to 31st December 232 visits were paid to this port by United States vessels either fishing or buying fish. (See Appendix B to this report.)

The returns for Canso were prepared by the late Mr. Young, the Collector of Customs there. They form Appendix A to this report, and are in the same form as they appeared in the report of 1890.

The table shows 183 visits paid, 114 by unlicensed and 69 by licensed vessels. I regret to have to record the death of this officer, and desire to bear public testimony to his ability and faithfulness as an officer; his never-failing tact enabled him to perform his duties in connection with foreign fishing vessels and to win at the same time the friendship and esteem of all who came in official contact with him.

In my last report I suggested that blank forms should be supplied, similar to that in Appendix A, to the collectors of Customs at certain ports. I am still strongly of opinion that these returns would be of great value, and would enable us to form a very accurate estimate of the use made of our ports by foreign fishing vessels. The



ports from which it is desirable information should be obtained are the following: Grand Manan, Westport, Yarmouth, Sandy Point (now obtained), Shelburne, Pubnico, Argyle, Barrington, Lockeport, Liverpool, Halifax, Liscomb, Isaac's Harbour, Whitehaven, Canso (now obtained), Crow Harbour, Port Malcolm, Port Mulgrave, Port Hawkesbury, Port Hood, Cheticamp, Aspy Bay, Ingonish, North Sydney, Louisburg, Arichat, Georgetown, P.E.I., Souris, Malpeque, Cascumpeque, Gaspé Basin, Que.

#### CUSTOMS.

The system of stamping the clearances of fishing vessels, instead of taking them up and issuing fresh papers each time they enter port, continues to work satisfactorily wherever tried and the practice should be made as general as possible.

#### PILOTAGE CHARGES.

In my last report I recommended that the Pilotage Act should be amended by extending the exemption from compulsory pilotage to vessels of 120 tons. This is the limit adopted by the Halifax Commission; it is broad enough practically to exempt the entire fishing fleet and its general adoption would do away with one of the questions which occasionally arises as to the liability of United States fishing vessels for pilotage. At the same time, it would not in any way affect the tariffs of the pilotage authorities in the cases where the pilot's services were sought or accepted.

#### THE MACKEREL FISHERY OF 1891.

The mackerel fishery of this year was, so far as Canadian waters are concerned, a very fairly successful one, and on the coast of the United States this fishery exhibited some signs of improvement, large numbers of small and immature fish having been taken there during the season.

Discouraged by repeated years of failure since Canada closed her inshore waters to United States fishermen, far fewer vessels fitted out in New England ports to prosecute the mackerel fishery this year than formerly. In fact, only 43 vessels in all were fitted out for this fishery. Of these, thirty-six visited either the Cape shore or North Bay, making a catch in the waters off the Canadian coasts of 6,824 barrels. This is 1,600 barrels less than the amount taken by the United States fleet last year, but as there were only thirty-six vessels this year as against sixty-four vessels last year, the amount per vessel has risen from 132 barrels per vessel to 190 barrels per vessel nearly.



The following table gives a list of the United States mackerel fishing vessels fishing off the Canadian coasts during the season of 1891:—

LIST of United States Vessels engaged in the Mackerel Fishery off the Canadian Coast during the year 1891.

Name of Vessel.	Port of Registry.	Catch.	Remarks.
		Brls.	
Alice Jordan.....	Gloucester.....	460	
Ambrose H. Knight.....	do .....	150	
Caroline Vooght.....	do .....	250	
Carl Schurz.....	do .....	290	
Carrier Dove.....	do .....	120	
Davy Crocket.....	do .....	210	
do second trip.....	do .....	15	
Emma W. Brown.....	do .....	200	
Ellen Lincoln.....	do .....	125	
Ethel B. Jacobs.....	do .....	305	And 75 brls. herring.
do second trip.....	do .....	92	
Enola C.....	do .....	6	
Eastern Queen.....	do .....	42	
Fredonia.....	do .....	205	
Governor Butler.....	do .....	180	
do second trip.....	do .....	42	
Geo. F. Edmunds.....	do .....	200	
Grayling.....	do .....	215	
Herald of the Morning.....	do .....	14	
Herbert M. Rogers.....	do .....	200	
Hattie D. Linnell.....	do .....	20	
do second trip.....	do .....	115	
Henrietta Francis.....	Portland.....	70	
Hattie M. Graham.....	Gloucester.....	125	
do second trip.....	do .....	20	
Jeanie Severns.....	do .....	150	
Lillie B. Fernald.....	Portland.....	Clean.	Reported 70 brls. by Port Mulgrave.
Laura Belle.....	Gloucester.....	do	
Lizzie Maud.....	Portland.....	380	
Lizzie M. Center.....	Gloucester.....	360	
do second trip.....	do .....	120	
Lizzie W. Hannum.....	do .....	350	
Laurel.....	do .....	35	
do second trip.....	do .....	No report.	
Marion Grimes.....	do .....	50	
Norumbega.....	do .....	500	
do second trip.....	do .....	100	
Notice (hooker).....	do .....	200	
Roulette.....	Boston.....	150	
S. F. Maker.....	Gloucester.....	206	
do second trip.....	do .....	150	
Two-Forty.....	do .....	140	
Uncle Joe.....	Portland.....	150	
W. M. Gaffney.....	Gloucester.....	150	
Yosemite.....	do .....	24	
Total catch.....		6,886	

The movements of this fleet were different this year from any year since the re-establishment of a Fisheries Protection Service and the closure of our territorial waters to United States vessels. Upwards of thirty sail came down at the opening of the season 1st June, and in the first few weeks secured nearly five thousand barrels. The great bulk of this fleet returned home before the 1st of July, leaving only four or five vessels on the coast; these ultimately followed the others, and in September there were only one or two vessels fishing. Five more came down for the fall fishing in October, which, on account of the bad weather, was only partially successful.

The following table gives the catch of mackerel made by United States vessels in the waters off the Canadian coast for the years 1888, 1889, 1890, 1891 :—

1888—83 vessels take	10,418 barrels,	average	126 barrels per vessel.
1889—62 do	6,755 do	do	109 do
1890—64 do	8,443 do	do	132 do
1891—36 do	6,886 do	do	191 do

The total catch made in all waters by United States vessels was 35,528 barrels, being more than double the quantity taken last year, and if from this amount we subtract the amount taken off the Canadian coasts it leaves 28,704 barrels as the mackerel product of the waters off the New England coasts, which last year, though fished by a larger fleet, only produced 7,697 barrels, thus showing a marked improvement of the fishery in these waters.

The following table shows the catch by Canadian and by United States fishermen from 1885 to 1891 inclusive. As the Canadian returns are not yet available, the Canadian catch for 1891 is estimated, but that of United States fishermen is taken from the returns as published by the Boston Fish Bureau :—

Year.	Canada.	United States.	Total.
1885 .....	148,450	330,000	478,450
1886 .....	152,292	80,000	232,292
1887 .....	131,653	78,000	209,653
1888 .....	65,777	40,000	105,777
1889 .....	65,849	17,794	83,643
1890 .....	101,513	16,140	117,653
1891 .....	125,000	35,528	160,528

The improvement in the fishery is quite marked, and an examination of the facts gives great strength to the contention that the temporary abolition of purse-seining has been very beneficial.

In 1888 the prohibition of purse-seining came into force on all the New England coasts. The prohibition continuing up to the 1st of June in each year, does, as I have shown in my former reports, protect the gravid fish on the coasts of New England, and, to a limited extent, also on the southern coasts of Nova Scotia and the Bay of Fundy. And now we find, co-incident with the expiration of the period when we might reasonably expect to meet with some effects from this prohibition, that a decided improvement has taken place in the fishery within the protected area. Another strong argument in favour of this theory is that a very large proportion of the fish taken in this area were immature, being either tinkers or small 3's, and it was to capture these fish that the fleet of purse seiners stayed off their own shore instead of coming down to the Gulf. In this fishing again the effect of the increased demand for fresh fish was felt; for in many cases small fares of these immature fish were landed fresh and sold, instead of being cured and salted, the small fish bringing proportionately a much higher price fresh than they would have done after being salted.

In view of the success which has apparently attended the suppression of the use of the purse-seine prior to the spawning season off the New England coasts, it is only reasonable to presume that a like benefit would accrue from similar action in other places.

In Canada we have a law which absolutely prohibits the use of the purse-seine within the territorial waters of the Dominion of Canada, but to be an effectual protection for the fish the prohibition must extend beyond the conventional three-mile limit. I would again bring before your notice the need of international co-operation to secure the restoration of this fishery. I have always contended, and still maintain, that owing to the gradation of marine climate, due to latitude and to the physical characteristics of the areas, the spawning seasons are different, and therefore a period which gives ample protection to the southern or New England fishing ground will not give adequate protection to the Nova Scotian or to the Gulf fishery.



In my report of last year I dealt very fully with this question, and the events which have transpired during this season all point significantly to the correctness of the conclusions then arrived at. It will be observed that the only area where any noticeable improvement in the fishing has taken place is in the one where the prohibition of purse-seining extends to the high seas, and is of sufficient duration to protect the fish until after the spawning season is over. Couple with this the observed fact that a very large proportion of the increased catch in this particular area were young or immature fish, and the evidence is certainly remarkable enough to warrant the conclusion that in this case the prohibition and increase stand in the relation of cause and effect.

Under these circumstances, I feel justified in again urging on your notice the advisability of securing the co-operation of the United States Government to some such arrangement as that proposed in my report for last year, so that a similar degree of protection may be given to the fish in the northern waters to that which now prevails off the New England coast. The necessity for this will appear more evident when it is pointed out that the United States fleet of seiners alone took from our Atlantic coastal waters, before the 30th of June, nearly five thousand barrels of fish; this quantity, being taken just prior to the spawning season, must naturally affect the supply, which is admittedly much diminished. Perhaps the most striking way of regarding the capture of these fish is to invert the position and think what a triumph on the part of the pisciculturist it would be regarded if, towards re-stocking these depleted waters, he could say that there had been deposited no less than one million adult gravid fish just ripe for the process of natural reproduction; yet this quantity of fish in just that condition were taken off our shores as described above. Canada has shown her *bonâ fide* interest by the Bill prohibiting purse-seining which Parliament has passed, and I am convinced that the more enlightened, at any rate, among the United States fishermen, will not object to such protective legislation as may be necessary to restore and preserve this fishery.

The evil, which I have pointed out in former reports, of excessive gill-net fishing still continues unabated, and it is most desirable, in the interest both of this and other fisheries, that this means of fishing should be regulated. This question will, however, be dealt with in another portion of this report.

In Canada the increased demand for fresh fish has also been felt, and has considerably affected this fishery. Large quantities of mackerel are now forwarded fresh at all seasons of the year, which formerly were salted down; and in the fall fishing at Canso it was stated in the press that though the take of mackerel had been fair and of fine quality, the proportion forwarded to market fresh had been so large that probably not more than a hundred barrels of salted fish would be put up out of the fall run.

The following return, furnished by the courtesy of the Railway Department, is interesting as showing the growth of the fresh fish trade. And it must be remembered that a very large proportion of the fish exported fresh is shipped by sea to Boston—both from Charlottetown, Halifax and Yarmouth—so that the returns, whilst exhibiting the growth of the trade, in no wise represent its volume.

Statement showing the quantity of fresh fish carried over the Intercolonial Railway during the following years:—

	Tons.
1875-76.....	1,249
1876-77. ....	1,429
1877-78.....	2,176
1878-79.....	2,638
1879-80.....	1,802
1880-81.....	2,085
1881-82.....	2,033
1882-83.....	2,723
1883-84.....	3,375
1884-85.....	3,643



	Tons.
1885-86.....	5,987
1886-87.....	4,400
1887-88.....	3,739
1888-89.....	5,034

## THE LOBSTER FISHERY.

The lobster fishery of 1891 was a great improvement over that of 1890, the increase being generally estimated at about forty per cent in the Gulf of St. Lawrence.

The success which attended the operation of the packers during the season of 1890 lead to a very considerable increase in the number of factories; and in many instances the older packers, in order to keep their ground, were obliged to add to the number of traps which they formerly used. The increased catch therefore while admittedly partly due to a partial restoration of the fishery is in my opinion largely the result of an increase in the fishing appliances used.

On the Magdalen Islands the sudden illness that swept down in a single night on the whole population put a stop to the fishing when at its height and caused great loss to the inhabitants. In order to enable them to get some benefit from this fishery an extension of the season was granted till 31st July; and it is worthy of note, as indicating the revolution of opinion on the part of those engaged in the business, that the extension, though granted under circumstances so extreme as to prevent the probability of it being considered a precedent, was protested against by many packers who but a short time since would willingly have signed a petition for the extension.

In my last report I went at length into the question of the regulations needed for the preservation of this industry, and at the conference of fishery inspectors the subject was fully discussed.

The first and most important question is that of the enforcement of the size limit. Notwithstanding the extra assistance given to the inspectors this provision was admittedly only partially carried out, and I am still firmly of opinion that the rigid enforcement of this law would close every factory in Northumberland Straits and would render many others unprofitable.

During the season of 1891 a very considerable demand for fresh lobsters for the Boston and New York markets existed. Large quantities were shipped in the ordinary course of trade by the Yarmouth steamers, but besides this quite a number of small United States sailing vessels, from twenty-five to forty tons, were engaged in the purchase of these live lobsters from our fishermen. These lobsters have all to exceed 10 inches in length and they are bought from the fishermen at so much each, and though the price varies it is always much in excess of anything which the packers could afford to give. From every point of view this is a desirable form of fishery and should be encouraged, because, since none but adult lobsters are taken, and these must be proper hard-shell lobsters not carrying exuded ova, the fishery practically protects itself. In this fishery a considerable advance has been made this year, and the lobsters are now carried alive for several days with but little risk or loss; and in spite of comparatively warm weather the sailing vessels were on our southern Nova Scotian shore up to the 18th of June. These small vessels carried from six to eight thousand lobsters each, and as the trade has increased it is reasonable to suppose that it is profitable. If profitable in Boston, it would be still more so if it were possible to deliver these lobsters alive in the English market, and with a fast line of steamships capable of going from Halifax to Plymouth in six days I believe that under the present system of carriage it would be possible to develop this trade.

The proposal to license all fishing boats and appliances used in the prosecution of the lobster fishery, and to license all canneries where lobster meat is put up in tins, has been discussed a good deal by the packers, and the license system considered generally will not, I think, meet with much opposition, though modification of several of the details is considered necessary. It does not seem to be desirable to

describe the boats in the license, because a fisherman may have to use different boats during the season; at many of the canneries the boats are anchored off in exposed situations all through the season, and they sometimes go adrift and receive damage which would prevent their use for a time. If, however, the trawl buoys are all marked, and it is made imperative to have two trawl buoys for every hundred traps on the ground line, and if this mark is registered in the license the enforcement of the law will be rendered much easier.

The two substantially protective measures of the regulations proposed in my report of last year are the enforcement of a special close season for packing, and the utilization of the ova taken at each cannery by means of hatching troughs or boxes, for a saving of a very small percentage of the colossal amount of ova now destroyed will represent quite a substantial addition to the crop of young lobsters.

During the past season a few experimental troughs were made and the system gave promise of considerable success. It seems that all the ova which are nearly ripe hatch out readily and a portion of the others, but the success or failure of the system will always depend largely on the intelligent work of the attendant. The ova must be carefully removed from the body of the female with sharp scissors, removing any damaged ova, the mass to be put in salt water immediately; then they must be worked over and the agglutinated masses of ova opened out, so that they may lie on the trays and move freely with the rocking of the trough.

Much difficulty was experienced this year in getting wire gauze that would stand the action of the salt water, but if an order is given for a large number of troughs it would cost very little to have a gauze made of the exact width of nickle-plated brass wire. This would stand the action of the salt for one season at any rate, and if any hole gets worn in the tray the whole thing could be temporarily covered with cheese cloth. Those packers who operated the troughs even for the few days at the close of the season were quite enthusiastic about the proposed system and volunteered to co-operate with the department in any way thought desirable.

I am myself firmly of opinion that this system when properly worked is capable of doing much to improve the fishery, and consider that we are now in a position to decide on making an experiment on a sufficiently large scale to be of practical benefit.

The inspectors should be instructed to endeavour to secure the co-operation of the larger packers and to issue the troughs to them at the rate of ten troughs to a factory whose pack last season was a thousand cases. I am of opinion that a thousand traps can be well made with brass screws, nickelled gauze, etc., for the sum of two thousand six hundred dollars. They are to be fitted complete with mooring slings, so that they shall be, when delivered, all ready to put in the water.

The packers could be supplied in the order of their application to the inspector, and should undertake to detail a man specially for the work of saving the ova and handling these troughs, the condition on the part of the department being that if the work is faithfully performed the law against the capture of female lobsters carrying exuded ova shall not apply to such canneries as the inspector certifies to have faithfully operated the hatching troughs during the season.

The lobster hatchery at Caribou Harbour was this year in operation for a portion of the season and successfully hatched out a large number of young lobsters. From the nature of the work it will be readily seen that the area over which the beneficial effects of the lobster hatchery can be spread is necessarily limited, and it would be impossible to erect such a number of hatcheries as would be necessary to save all the ova now destroyed; but this can be done to quite an appreciable extent at any rate by the trough system, and I would therefore urge on your notice the advisability of at once making preparations for the construction of these simple yet efficacious implements.

#### THE CLOSE SEASON.

Speaking generally, the close season is well observed on our coasts, though a few perhaps of the smaller packers or individual fishermen continued operations for a



short time after the season ended, but the great place where illegal fishing used to be carried on during the fall months was on the eastern coast of Nova Scotia, between Halifax and Isaac's Harbour, and this region has during the fall been closely watched both by the inspectors and by the vessels of the Fisheries Protection Service, and it is safe to say that the amount of illegal fishing done this year will not be equal to one-tenth of that formerly carried on in this district. In this connection the proposed regulation for marking the cases is perhaps the only way in which it is possible to absolutely insure the observance of the close season. The people who break this law are not the respectable packers, but a few fishermen here and there who having secured from some merchant a supply of tins and cases, boil the lobsters in small tin pots round their houses or in the bush and put up the goods in an inferior manner. If the regulation is made that each case of lobsters shall be marked by a fishery overseer or special officer no great inconvenience could possibly be suffered by the packer, and it would be a positive guarantee that all cases so marked were put up in the proper season.

In other lines of business, such as the manufacture of illuminating oils, this system of marking each individual package by an inspector has been in force for years without any injury to the trade; and where it seems that no other measure can be devised to secure the absolute observance of this close season, the packers may fairly be asked in the interest of the fishery to adopt it, even if it at first caused some inconvenience; and as it will save the department a considerable expenditure in the way of travelling expenses and expenses connected with prosecutions, I think the department may fairly bear the cost of putting on the stencils or brands.

There is another system of protection which I have urged on your notice for several years, viz., the establishment of closed areas or nurseries for the lobsters, in which no person should be permitted to set any traps or pots whatsoever. This system was discussed at the conference of fishery inspectors held in Ottawa last winter and secured their warm appreciation. After discussion it was considered quite feasible to so arrange the closed areas as to give a fair proportion of protected breeding ground without unduly interfering with existing factories. This system of protected areas has many and great advantages over any other system that can be devised for the propagation of these crustaceans. They need not be in any absolute quantity, but can be selected here and there in the proportion approximately of five miles of protected coast line to twenty miles of that on which the fishing may be carried on. Convenient head lands and ranges of churches, etc., can be established as demarcating lines, so that no cost is involved when the system is first started.

Within this protected area the young lobster fry will be hatched out in great numbers, and then when in their free swimming state they will be carried up and down the coast by wind and tide, replenishing the waters where the fishing is carried on.

There is one unfortunate phase of the lobster business, so far as its regulation is concerned, and that is the small amount of capital which is required to start operations for a minor factory. The consequence is that the moment the fishing improves or prices rise a number of small factories start in every little cove and creek on the coast, and in order to meet their competition the larger packer, who is in the business to stay, increases the number of his traps and the ground is over-fished, the business becomes unprofitable and the small packer drops out. This cycle of events will repeat itself with unfailing regularity, and is undesirable for many reasons, chiefly, perhaps, because the smaller packer as a rule puts up an inferior article, and thus by lowering the quality puts the price down and injures the reputation of the whole district.

Two methods of minimizing this evil have been presented. The first is one advocated by many packers, viz., the leasing to them of the right to fish lobsters in certain areas, and the second is to charge a license fee of a certain amount each year, not less than a certain fixed sum, say fifty or seventy-five dollars, and as the prepayment of the fee in cash would be a very considerable proportion of the total cash outlay, this latter system seems to commend itself as one likely to work advan-



tageously to the industry because it would deter many who now go into the business from making the venture, while at the same time the fund thus created would pay for the exceptional expenditure incurred on behalf of this fishery.

In conclusion I can only add that each year but confirms my opinion that without the license system, or a scheme of adequate penalties, it will always be impossible to enforce properly the provisions for the benefit of the lobster fishery. I therefore recommend the license system as being the one which could be enforced with least friction, it being clearly understood that a second offence would carry with it the forfeiture of the license to the premises where the illegal work was done.

This license must apply to both fishermen and canners, because on the Nova Scotian coast, especially to the westward where the trade is principally for export, the fishermen all own their own gear, and it is most desirable that the department should know how many traps are in use in each district.

The marking of the lobster trawl buoys is also a matter of great importance, as it is almost impossible at present to identify the property of any one fishing out of season.

#### THE SHORE FISHERY AND THE BAIT QUESTION.

This bait question lies at the root of the whole matter and simply means success or failure to the fisherman. Fish of one kind or another he can generally get, but often in the very height of summer bait will suddenly become scarce and the fisherman has to suspend his operations.

The extent to which this question affects the fishing on the coast may be judged from the fact that of fifty-two stations reporting to the Intelligence Bureau eleven of them gave scarcity of bait as the reason for the lightness of the catch. The reports were as under:—

English Bay, Anticosti—Few good catches were made during the season, owing chiefly to the great scarcity of bait.

Fox Bay, Anticosti—In August, when bait became available, the catch was on the average good.

South West Point, Anticosti—The great obstacle to the fishery seemed to be want of bait.

Grand River, Que.—Rough weather and scarcity of bait seemed the great obstacles.

Paspebiac, Que.—In August and September fish seemed plentiful, but successful catches were prevented by want of bait.

West Arichat, C.B.—Fishing closed 10th October; scarcity of bait and inferior boats the principal cause.

Freeport, N.S.—Hundreds of quintals more would have been caught if the fishermen could have got bait during the summer.

Port Hood, C.B.—With the exception of a few fair stops of squid in traps, bait of all kinds since the spring herring left has been scarce.

Ingonish, C.B.—Great scarcity of bait reported during August, September and October.

North Sydney, C.B.—In spring, when codfish were plenty, there was no bait, and afterwards when bait was available the weather was unfavourable.

Port Medway, N.S.—Scarcity of bait and presence of dog fish interfered very materially with the catch.

Reports such as these speak for themselves, and amply confirm the statement that a continuous and reliable supply of bait is the secret of the fisherman's success.

In my report of last year I urged the advisability of the adoption of the freezing and cold storage system at each fishing centre, so as to carry over a supply of each kind of bait as it came into season.

During the winter Mr. Tardiff, at Newport Point, Quebec, adopted the principle, and adapted an old building for the work on an experimental scale. When the spring herring came in a fairly large quantity were put up and kept perfectly in the cold store.

At first the fishermen somewhat decried the use of this frozen bait, but they soon found its value. The system of fishing at this point is that two or three fishermen go off to the local banks together in a large boat carrying bait nets with them, and the day of their arrival on the bank is always wasted, because having no bait they could not fish until their nets had been set over night. The supply of frozen herring, however, which was given them just before leaving, enabled them to fish the moment they reached their ground; and experience showed that a few herrings wrapped in an ordinary canvas bag and kept under the bottom boards of the boat would on the second day out still have to be exposed or soaked to thaw completely out, so that they could be cut up for baiting the hooks. The bait was most successful, and lasted well on the hooks.

This bait was also used by small-boat fishermen, and it was found that a man fishing in a small boat close to his own door with this steady supply of bait to fall back on did almost as well as those who went further out in the large boats. When it is remembered that for a number of years past there has been practically no small boat fishery at this point, the significance of this success is very marked.

Another instance of the success during the past season of this system is at Canso, N.S. In this case Mr. Whitman travelled all over the lake region and carefully examined the system in force there for the preservation of fish by cold storage, which is that described in Bulletin No. 1 of the Department of Fisheries, mentioned later in this report. On his return to Canso Mr. Whitman erected an experimental apparatus and secured a quantity of squid, which were preserved.

The use of this bait proved most satisfactory. One vessel fishing on the Canso and Carouse Bank baited with it entirely, and late in the season managed to make a good fare. Other vessels bought small quantities, but all bore testimony to the excellent condition and killing power of the bait.

For the boat fishing, with which this paragraph more particularly deals, the benefit was even more more marked; the fishermen had a continuous supply of good bait and were able to take advantage of every favourable turn in the weather, and continued to fish up to the 16th of December, at which dates the boats were still fishing successfully each fine day. The bait supply being permanent the season was thus extended much beyond the usual period. On the other side of the bay from Canso to West Arichat, in a much more sheltered position, the reporter for the Fishery Intelligence Bureau gives the information that fishing ceased there on the 10th October. We thus see that the mere fact of having a plentiful bait supply extended the season for the Canso fishermen more than two months beyond that of their competitors on the opposite side of the bay.

During the early part of the season the spring herring were late in arriving on our shores, and the Magdalen Islands were for a time almost inaccessible from ice, just at this time, when the spring banking fleet all fitted out only waited for bait to make a start. The Newfoundland authorities absolutely refused to sell bait licenses to Canadian fishing vessels, thus causing a considerable delay and much inconvenience to our fishing fleet.

In this incident there lies an object lesson for our fishermen of the value of the anadromous fishes, for the gaspereaux are in the early part of the season a very good bait, and if the supply of these fish had not been so terribly reduced these very bankers could have baited easily on their own shores, as the La Have river alone in its natural condition would have supplied this whole fleet. As it was, many of the fleet did eventually bait with gaspereaux, but they were shipped from the New Brunswick shores of the Bay of Fundy and sent across by steamer to Annapolis and thence by rail to Lunenburg.

This incident in no sense indicates that Canada is dependent on any other country or colony for even a portion of her bait supply, but in order to retain our independence and to have a continuous supply of bait at all times the anadromous fisheries must be cared for, the mackerel fishery must be preserved and stores must be provided for keeping supplies of fish bait.



I have dealt at length in former reports on the question of the anadromous fisheries, and need only here repeat that obstruction of streams is more fatal than pollution. A gaspereau may swim up through water charged with rotten saw-dust, and so long as it lies quiescent the fish gets up safely, but when that gaspereau arrives at the foot of the dam and finds no fish-pass, or perhaps one the entrance of which is 2 feet out of the water, then it is effectually debarred from reaching its natural spawning ground, and every such case acts injuriously on the fishery to an extent not readily conceived by those who have not carefully examined the subject.

The injury of this gaspereau fishing is not, however, entirely due to either the pollution or obstruction of streams, but to excessive net fishing carried on in the tidal waters and also in the estuaries up to the limit laid down in the regulation for the district. This excessive net fishing in some places must be seen to be realized; any description approaching actuality would appear like exaggeration. Habitant's Bay, Cape Breton, and several other points at certain seasons of the year simply contain serried walls of net in labyrinthine confusion, so that no school of fish, if the expression is permissible in regard to gaspereau, could possibly reach the waters of the lake or stream they sought.

The remedy must be drastic to be effectual, and I can imagine no better or more effectual method than the adoption of an old Prince Edward Island law which was also at one time the custom if not the law in Nova Scotia, viz., that prohibiting fishermen from setting their nets or leaving them set between certain hours of the day, say 7 a.m. and 5 p.m., and compelling all nets to be lifted on Saturday morning and not allowed to be set again till Sunday night, thus giving the fish ten hours of each day and one day of each week on which they may pass freely up to the spawning grounds.

This law though advocated here with special reference to its application to the protection of the gaspereau fishing, is almost as necessary for the preservation of the mackerel and herring fishing; and, as many of the fishermen already see the necessity for this reform, at the first enforcement of the law we should have a strong body of them active in its support.

#### STATISTICS OF FISHERIES.

I would again urge on your notice the value of properly-prepared and localized statistics of catch suggested in my report of last year. In regard to the movement of many of our deep-sea fishes, we are absolutely in the dark; in the case of others, such as the mackerel, apparent movements are often deceptive and give rise to erratic theories; but continuous and localized accurate records of catch form a sure foundation on which to build a conclusion. The system advocated in my last year's report is still in use on the coast of Scotland and has given many excellent and reliable results, and it cannot be doubted but that a similar result would follow from its adoption in this country.

#### THE CONSTRUCTION OF NEW STEAM VESSELS FOR THE FISHERIES PROTECTIVE SERVICE.

During the past year the construction of two composite screw steamships for the Fisheries Protective Service has been authorized and one of them has been almost completed, but will, under arrangement, be cared for during the winter by the builders.

The contract for this vessel was let for the sum of forty thousand dollars, thirty-one thousand dollars in cash, and the builders agreed to accept the steam yacht "Cruiser" at the sum of nine thousand dollars, this being the amount at which her cost stood on the books of the department.

The design for both these new vessels is the same; they are small vessels, but staunch and able sea-boats. They are built of Siemens steel with a rock elm bottom, and have a high turtle deck forward, and the curved projecting stem of the torpedo



boat. All the deck-houses are of iron, and rigidly fastened to the beams of the ship. They are fitted aft with large towing bits, so that they can take hold of any vessel in danger or distress, and assist them to a place of safety. They are fitted with ordinary two-crank surface-condensing compound engines, and a steel boiler calculated for 110 lbs. working pressure. The contract speed is eleven knots, but it is expected that these vessels will make fully twelve knots over the measured mile. Their dimensions are: length, 125 feet; breadth, extreme, 19 feet; depth of hold, 11 feet 3 in. Load—draught of water aft, 9 feet 6 in.; forward, 8 feet 6 in.; coal-carrying capacity, 60 tons—an amount which, for ordinary cruising speed at eight and a-half or nine knots per hour, will suffice for steaming a distance of nearly two thousand miles.

These vessels are specially designed to act as police and revenue cutters, and also to act as salvage tugs to vessels in distress, when no other assistance is available.

#### THE FISHERIES INTELLIGENCE BUREAU.

This bureau was again organized at the opening of the season, and its operations were extended to the north shore of the Gulf of St. Lawrence.

Many fishermen and others have borne testimony to the practical usefulness of the system, and as a police measure I have also found it of great value in reporting to me promptly the movements of both fish and vessels.

The accompanying list gives the names and stations of the reporters, and shows the extent to which the system covers our coasts:—

#### LIST of Fisheries Intelligence Reporters.

Residence.	Name.	Residence.	Name.
Alberton, P.E.I. ....	J. P. Brennan.	Mabou, C.B. ....	W. Grant.
Arichat, C.B. ....	R. Benoit.	Margaree, C.B. ....	M. A. Dunn.
Arichat (West), C.B. ....	C. P. Le Lacheur.	Magdalen Islands ....	J. Labourdois.
Bayfield, N.S. ....	E. G. Randall.	Malpeque, P.E.I. ....	J. M. McNutt.
Beaver Harbour, N.B. ....	E. W. Cross.	Meat Cove, C.B. ....	Alex. B. McDonald.
Bloomfield, P.E.I. ....	Lawrence Doyle.	Musquodoboit Harbour ..	George Rowlings.
Canso, N.S. ....	J. W. Young.	Newport Point, P.Q. ....	Mrs. Meunier.
Campo Bello, N.B. ....	Wellington Parker.	North Sydney, C.B. ....	A. G. Hamilton.
Caraguet, N.B. ....	Miss Louise C. Blackhall.	Paspebiac, P.Q. ....	Miss Laura Young.
Cheticamp, C.B. ....	S. Aucoin.	Percé, P.Q. ....	Miss A. Beck.
Digby, N.S. ....	J. M. Viets.	Port Hood, C.B. ....	Edward D. Tremain.
Escuminac, N.B. ....	H. W. Phillips.	Port la Tour, N.S. ....	J. W. Taylor.
Freeport, N.S. ....	Isalah Thurber.	Port Medway, N.S. ....	E. E. Letson.
Gabarouse, C.B. ....	R. McLean.	Port Mulgrave, N.S. ....	David Murray.
Gaspé, P.Q. ....	J. J. Annett.	Pubnico, N.S. ....	J. A. D'Entremont.
Georgetown, P.E.I. ....	Charles Owen.	Sand Point, N.S. ....	R. H. Bolman.
Grand River, P.Q. ....	Miss M. A. Carberry.	Salmon River, N.S. ....	J. N. Whitman.
Hawkesbury, C.B. ....	J. C. Bourinot.	Seven Islands, P.Q. ....	P. E. Vignault.
Ingonish, C.B. ....	E. B. Burke.	South-West Point, Anti. ....	Miss Grace Pope.
Isaac's Harbour, N.S. ....	S. R. Giffin.	Shippigan, N.B. ....	Mrs. A. Hamon.
L'Ardoise, C.B. ....	Wm. Brymer.	Spry Bay, N.S. ....	W. C. Henley.
Liverpool, N.S. ....	J. N. Dunlop.	Souris, P.E.I. ....	M. J. Foley.
Lunenburg, N.S. ....	W. M. Solomon.	St. Ann's, C.B. ....	D. McAulay.
Lockport, N.S. ....	George Stalker.	St. Peters, C.B. ....	D. Urquhart.
Louisburg, C.B. ....	P. O. Toole.	White Head, N.S. ....	C. H. Feltmate.
Long Point, P.Q. ....	John Vibert.	Yarmouth, N.S. ....	F. L. Hatfield.

The total cost of the bureau is within the estimated amount, and I have the honour to recommend that its operation be continued during the fishing season of 1892 at an expenditure not to exceed \$2,500.

Mr. Alex. Fraser, B.A., who had successfully acted as officer in charge of the central office of the bureau from the spring of 1890, was, during September, 1891, offered a position in the United States, which he felt bound to accept. He was suc-

ceeded in his office by Mr. Hutchins, of Halifax, who carried on the work up to the close of the season.

Mr. Hutchins' report on the movements of the fish during the season forms Appendix C to this report.

#### THE WORK OF THE PATROL VESSELS.

The ships of the service are, during the fishing season, almost constantly at sea, and although they often anchor for the night, this gives no chance of relaxation for the men.

No better idea could be given of the work done by the service than can be obtained by a perusal of Commander Wakeham's journal of the SS. "La Canadienne." This gentleman, besides being a commissioned fishery officer in the service, is also the inspector of fisheries for the Gulf division of Quebec and a commissioner of police. His journal is printed as Appendix D to this report.

In former reports I have urged that our fishing vessels should carry some distinctive sail mark by which they could be readily distinguished at a distance from United States vessels. Our vessels, do what we will, cannot be induced to show their colours, and the cutters are occasionally taken unnecessarily much out of their way by carelessness in this respect. As these vessels all draw the bounty, there could be no hardship in insisting that all should carry some readily-defined sail mark.

All of which is respectfully submitted.

ANDREW R. GORDON, Lieutenant, R.N.,  
*Commander of the Fisheries Protection Service.*

#### APPENDIX A.

LIST of United States Fishing Vessels which visited the Port of Canso, N.S., during the Year, 1891.

Date of Arrivals	Names of Vessels.	Ports of Registry.	Tons.	Men.	Whence Arrived.	If Licensed U, if Unlicensed U.	What in Port for.
1891.							
Jan. 2	Annie C. Hall .....	Gloucester....	84	14	Western bank.	U	Parted cable and went ashore.
do 9	Harry G. French....	do .....	95	7	Gloucester ...	U	For harbour, bound for herring, Newfoundland.
do 13	John H. Bray .....	do .....	79	7	do .....	U	do
do 16	Mayflower.....	do .....	108	16	do .....	U	For harbour, bound for banks.
do 26	Fanny W. Freeman.	do .....	90	14	do .....	U	do
Feb. 11	Abbie M. Deering ..	do .....	96	7	do .....	U	do herring, Nfld.
Mar. 31	Lizzie Griffin.....	do .....	101	16	From fishing..	U	do
April 1	John G. Whittier....	do .....	97	16	do .....	U	do
do 8	Annie Wealey .....	do .....	88	16	do .....	U	do
do 8	D. A. Wilson.....	do .....	86	14	do .....	U	do
do 13	Susie Hooper .....	do .....	73	13	Gloucester....	U	do bound Magdalens, for bait.
do 13	Carl W. Baxter.....	do .....	70	13	do .....	U	do
do 18	Gertie E. Foster....	do .....	83	16	do .....	U	do
do 20	Triton .....	do .....	67	14	From fishing..	U	do
do 20	Oresa.....	do .....	82	14	do .....	U	do
do 20	Laura Sayward.....	do .....	68	12	do .....	U	do
do 20	Saml. R. Crane.....	do .....	74	14	do .....	U	do
do 20	Henry Wilson.....	do .....	88	16	do .....	U	do
do 23	G. P. Whitman.....	do .....	89	14	Gloucester....	U	do
do 25	Blue Jacket.....	do .....	110	16	do .....	U	do
do 27	Willie M. Stevens..	do .....	76	16	do .....	U	do
do 27	Hereward .....	do .....	85	11	do .....	U	Came in for license to ship men.

## APPENDIX A.—List of United States Fishing Vessels, &amp;c.—Continued.

Date of Arrivals	Names of Vessels.	Ports of Registry.	Tons.	Men.	Whence Arrived.	If Licensed L, if Unlicensed U.	What in Port for.
1891.							
April 28	Ella M. Doughty	Portland	71	14	From fishing.	L	Harbour and seeking bait.
do 29	Edith S. Whalen	Gloucester	78	13	do	U	do Magdalens for bait.
do 29	Porter S. Roberts	do	72	14	do	U	do do
do 29	Reub. L. Richardson	do	92	18	Gloucester	U	do do
do 29	Emma E. Wetherell	Boston	109	18	From fishing.	U	do do
May 1	Sarah B. Putnam	Salem	76	12	do	U	do do
do 1	Reigel	Gloucester	107	17	Gloucester	U	do do
do 1	Mascot	do	77	14	do	L	Seeking bait and ice.
do 1	Lucille	do	99	14	do	L	Bait and ice.
do 1	Carrie E. Parsons	do	80	14	do	U	Harbour, bound Magdalens for bait.
do 2	Edgar S. Foster	do	99	16	do	U	do do
do 2	Stranger	do	92	14	do	U	do do
do 4	Abbie M. Deering	do	96	13	do	U	do do
do 4	Dora A. Lawson	do	119	18	do	U	do do
do 4	Spencer F. Baird	do	74	14	do	L	do ice, bait and repairs.
do 4	Mabel W. Walford	do	104	18	do	U	do bound Magdalens for bait
do 4	Polar Wave	do	86	14	do	U	do do
do 4	John W. Plummer	Portland	95	14	From fishing	U	do do
do 4	Orient	Gloucester	89	14	Gloucester	U	do do
do 4	William H. Jordan	do	86	16	do	U	do do
do 4	Nereiad	do	92	16	do	U	do do
do 4	Abbie F. Morris	do	77	14	do	U	do do
do 4	Cecil H. Lowe	do	75	16	do	U	do do
do 4	Ada S. Babson	do	146	20	From fishing	U	do wood and water.
do 4	Procyon	do	107	18	do	U	do bound Magdalens for bait
do 5	Orpheus	do	105	18	do	U	do do
do 5	Harry G. French	do	95	16	Gloucester	U	do do
do 5	Margaret Mather	do	91	16	do	U	do do
do 6	Joseph B. Maguire	do	88	18	From fishing	U	do and water.
do 8	Flora Dilloway	do	77	16	do	U	do do
do 8	Ellen M. Adams	do	85	16	do	U	do to land sick man.
do 8	Ella M. Doughty	Portland	71	14	do	L	do wood and other supplies.
do 11	Willie M. Stevens	Gloucester	76	16	Georget'n, PEI	L	do bound to banks baited at Georgetown.
do 14	Electa A. Eaton	do	73	14	do	L	do do
do 18	Mabel Kenniston	do	78	16	Gloucester	L	do bait and ice.
do 19	Iolanthe	do	70	12	do	L	do do and ship men.
do 21	Fredonia	do	109	17	Mack, seining.	U	do and repairs.
do 21	Emma W. Brown	do	73	16	do	U	do do
do 21	Alice C. Jordan	Gloucester	81	18	do	U	Harbour.
do 21	Norunbega	do	121	17	do	U	do and water.
do 22	Gov. Butler	do	87	17	do	U	do do
do 22	Herald-of-the-Morning	do	68	16	do	U	do do
do 23	Carrier Dove	do	82	16	do	U	do and water.
do 25	Marion Grimes	do	58	10	From fishing.	U	do do
do 25	Jennie Severns	do	106	17	Mack, seining.	U	do do
do 25	Arthur Clifford	Provincetown	80	14	From fishing.	U	do and repairs.
do 27	Enola C.	Gloucester	62	15	Mack, seining.	U	do do
do 27	Ethel B. Jacobs	do	125	17	do	U	do do
do 28	Emma W. Brown	do	73	16	do	U	do water and medical treatment to master.
do 28	Marion Grimes	do	58	15	From fishing.	U	do do
do 28	Jennie Severns	do	106	17	Mack, seining.	U	do do
do 28	Ethel B. Jacobs	do	125	17	do	U	do do
do 28	Herbert M. Rogers	do	73	16	From fishing.	U	do do
do 28	Caroline Vaught	Portland	79	17	Mack, seining.	U	do do
do 28	E. F. Willard	do	54	12	From fishing.	U	do wood and water.
do 29	Gladiator	Gloucester	107	17	do	U	In for license to get bait and ice.
do 29	Thetis	do	91	16	do	U	Harbour, wood and water.
June 2	Martha C.	do	75	14	Mack, seining.	U	do and water.
do 3	Eastern Queen	do	57	15	do	U	do do
do 3	Ambrose H. Knight	do	87	17	do	U	do do



## APPENDIX A.—List of United States Fishing Vessels, &amp;c.—Continued.

Date of Arrivals	Name of Vessels.	Ports of Registry.	Tons.	Men.	Whence Arrived.	If Licensed L, if Unlicensed, U.	What in Port for.
1891.							
June 3	Uncle Joe .....	Southport .....	63	15	Mack, seining.	U	Harbour and water.
do 3	Mantonmah. ....	Portland. ....	73	17	do .....	U	do do
do 8	Reub. L. Richardson	Gloucester. ....	92	18	From fishing..	U	do do
do 8	Marsala .....	do .....	76	14	do .....	L	do bait, ice and supplies.
do 8	Ella M. Doughty. ....	Portland. ....	71	16	do .....	L	do do
do 9	Gladstone. ....	Gloucester. ....	97	16	do .....	U	Same in for license, bait and ice.
do 10	Mabel Leighton. ....	do .....	71	12	do .....	U	do bait, ice and
do 12	Enola C. ....	do .....	62	15	Mack, seining.	U	Harbour. [ship men.
do 12	Emma W. Brown. ....	do .....	73	16	do .....	U	do
do 13	Fredonia. ....	do .....	109	17	do .....	U	do
do 13	Lilla B. Fernald. ....	Portland. ....	78	15	do .....	U	do
do 13	Gov. Butler. ....	Gloucester. ....	87	17	do .....	U	do
do 13	Carrier Dove. ....	do .....	82	16	do .....	U	do
do 13	George F. Edmunds. ....	do .....	141	18	do .....	U	do and water.
do 13	Lizzie M. Center. ....	do .....	77	17	do .....	U	do
do 13	Davy Crockett. ....	do .....	80	17	do .....	U	do
do 13	Linnell .....	do .....	89	17	do .....	L	do water and tranship- ment of catch.
do 15	Mystic .....	do .....	78	16	From fishing..	U	For license, bait, ice supplies, &c.
do 16	Marion Grimes. ....	do .....	58	15	Mack, seining.	U	For harbour.
do 18	Mystic .....	do .....	78	16	From seeking bait. ....	L	For ice.
do 23	Marsala .....	do .....	76	13	From fishing..	L	For bait and ice.
do 23	Mystic .....	do .....	78	16	do .....	U	do
July 2	A. T. Gifford. ....	do .....	81	14	do .....	U	For license, bait, ice, &c.
do 4	Nellie Dixon. ....	Boston. ....	105	18	do .....	L	For bait, ice and supplies.
do 4	A. T. Gifford. ....	Gloucester. ....	81	14	From seeking bait. ....	L	For ice.
do 4	Matthew Keany. ....	do .....	66	12	From fishing..	L	For bait and ice.
do 4	Mabel Leighton. ....	do .....	71	14	do .....	L	For transhipment of catch, bait and ice.
do 7	Gladstone. ....	do .....	97	16	Gloucester. ....	L	For bait and ice.
do 7	Mystic .....	do .....	78	14	From fishing..	L	For transhipment of catch, bait and ice.
do 10	do .....	do .....	78	14	From seeking bait. ....	L	For ice.
do 15	Willie M. Stevens. ....	do .....	76	14	From fishing..	L	For bait and ice.
do 15	Susan L. Hodge. ....	do .....	77	14	From Gloucester	U	For license, bait and ice.
do 15	Gladiator .....	do .....	107	16	do .....	L	do
do 20	Winona. ....	do .....	103	16	From fishing..	U	To land sick man.
do 20	Orient .....	do .....	89	16	do .....	U	For harbour.
do 22	Reub. L. Richardson	do .....	92	18	do .....	U	do
Aug. 1	Gertie Evelyn. ....	do .....	81	14	do .....	U	do
do 1	E. R. Willard. ....	Portland. ....	54	10	do .....	L	For bait and ice.
do 1	Abbie M. Deering. ....	Gloucester. ....	96	14	do .....	U	do
do 1	Abbie F. Morris. ....	do .....	77	14	do .....	U	For harbour and repairs.
do 1	Reigel. ....	do .....	107	18	do .....	L	For bait and ice.
do 3	William H. Oaks. ....	do .....	67	14	do .....	L	do
do 3	Mabel Leighton. ....	Gloucester. ....	71	14	do .....	L	Bait and ice.
do 4	Augusta H. Johnson	do .....	69	14	do .....	L	do
do 4	Knight Templar. ....	do .....	69	12	do .....	L	do
do 6	Flash. ....	do .....	69	14	do .....	L	do
do 8	Ellen M. Adams. ....	do .....	85	16	do .....	L	do
do 11	Henry Wilson. ....	do .....	88	14	do .....	U	Harbour.
do 11	A. T. Gifford. ....	do .....	81	16	do .....	L	Bait and ice.
do 12	Spencer F. Baird. ....	do .....	74	14	do .....	L	do
do 12	J. W. Campbell. ....	do .....	79	8	do .....	L	Bait, ice and ship men.
do 13	Hereward .....	do .....	85	16	do .....	U	Harbour.
do 15	Flash. ....	do .....	69	14	do .....	L	Bait, ice and supplies.
do 17	Emma E. Wetherell. ....	Boston. ....	109	18	do .....	L	do do
do 17	Knight Templar. ....	Gloucester. ....	69	14	do .....	L	do do
do 19	William H. Oaks. ....	do .....	67	14	do .....	L	do salt.
do 19	Lucille. ....	do .....	99	16	do .....	L	do supplies.
do 19	Marathon. ....	do .....	65	14	do .....	U	Harbour.
do 21	Gardiner W. Tarr. ....	do .....	62	14	do .....	L	Bait, ice and supplies.

APPENDIX A—List of United States Fishing Vessels, &c.—*Concluded.*

Date of Arrivals	Names of Vessels.	Ports of Registry.	Tons.	Men.	Whence Arrived.	If Licensed L, if Unlicensed U.	What in Port for.
1891.							
Aug. 21	Edgar S. Foster....	Salem.....	94	16	From fishing..	U	Harbour.
do 22	Susan L. Hodge....	Gloucester....	77	16	do ..	L	Bait, ice and supplies.
do 25	Fanny A. Spurling....	do .....	81	16	do ..	L	do do
do 26	Electa A. Eaton....	do .....	73	14	do ..	L	do do
Sept. 3	J. W. Campbell....	do .....	79	14	do ..	L	do do
do 8	Flora Dilloway....	do .....	77	16	do ..	L	do do
do 8	Gertie Evelyn....	do .....	81	14	do ..	L	do do
do 11	Penobscot .....	do .....	85	16	do ..	L	do do
do 11	Gladiator .....	do .....	107	16	do ..	L	do do
do 14	Mist .....	do .....	68	9	Iceland.....	U	Homeward bound.
do 14	Porter S. Roberts....	do .....	72	16	From fishing..	L	Bait, ice and supplies.
do 16	A. T. Gifford....	do .....	81	14	do ..	L	do do
do 16	Bertha May .....	do .....	75	14	do ..	L	do do
do 16	Mabel Leighton....	do .....	71	14	do ..	L	do do
do 16	Margaret Mathers....	do .....	91	16	do ..	L	do do
do 18	Annie Wesley .....	do .....	88	16	do ..	L	do do
do 21	Edward Perkins .....	do .....	86	16	do ..	U	Repairs.
do 23	Flora Dilloway....	do .....	77	16	do ..	L	Bait, ice and supplies.
do 23	Bertha May .....	do .....	75	14	do ..	L	Bait, ice, &c., and land sick man
do 28	Bertha Nickerson....	Booth Bay....	136	21	do ..	L	Water and supplies.
do 29	Susan L. Hodge....	Gloucester....	77	14	do ..	L	Bait, ice and supplies.
do 30	Hereward .....	do .....	85	14	do ..	L	do do
Oct. 1	Samuel R. Crane....	do .....	74	14	do ..	U	Harbour and water.
do 1	Penobscot .....	do .....	85	16	do ..	L	Bait, ice and supplies.
do 9	Senator Saulsbury....	do .....	102	18	do ..	U	Harbour and water.
do 13	Flora Dilloway....	do .....	77	16	do ..	L	Bait, ice and supplies.
do 16	Gladstone .....	do .....	97	16	do ..	L	do repairs.
do 16	Stranger .....	do .....	82	14	do ..	U	Harbour, water and land sick man
do 19	Annie Wesley .....	do .....	88	16	do ..	L	Bait, ice and supplies.
do 22	Fanny Spurling....	do .....	86	16	do ..	L	Bait, ice, anchor and other supplies
do 22	Mist .....	do .....	68	6	Gloucester ..	U	Harbour bound Nfld. for herring.
do 22	D. A. Wilson .....	Salem.....	86	16	From fishing..	L	Bait, ice, water and supplies.
do 24	Wm. H. Jordan....	Gloucester....	86	14	do ..	L	do do
do 27	Fanny Spurling....	do .....	86	16	do ..	L	do do
do 30	Magnolia .....	do .....	108	16	do ..	U	Harbour and water.
do 31	Orion .....	do .....	89	16	do ..	U	do
Nov. 2	Mary Storey .....	do .....	69	14	Fishing, Canso Bank.....	L	Bait, ice and water.
do 3	Zenobia .....	do .....	74	16	From fishing..	U	Harbour and water.
do 4	Electa A. Eaton....	do .....	73	14	do ..	L	Bait, ice and supplies.
do 5	Knight Templar....	do .....	69	7	From Sydney..	L	Ship men to replace deserters.
do 6	Mary Storey .....	do .....	69	14	do Canso Bk.	L	Harbour.
do 6	Henry Wilson....	do .....	88	14	do fishing....	U	do
do 7	Samuel R. Crane ..	do .....	74	14	do ..	L	Bait and ice.
do 17	Concord .....	do .....	93	7	Gloucester ..	U	Harbour bound Nfld. for herring.
do 18	Minnesota .....	do .....	90	16	From fishing..	U	Shelter and repairs.
do 20	Mary Storey .....	do .....	69	14	do Canso Bk.	L	Bait and ice.
do 21	Knight Templar....	do .....	69	10	do fishing..	L	do and supplies.
do 21	Annie Wesley .....	do .....	88	16	do do ..	L	do do
do 23	Porter S. Roberts....	do .....	72	14	do do ..	L	do do
do 23	Mary Storey .....	do .....	69	14	do Canso Bk.	L	Harbour.
do 23	Henry Wilson .....	do .....	88	14	do do ..	U	do
do 27	Knight Templar....	do .....	69	12	do do ..	L	Bait, ice and supplies.
do 27	Porter S. Roberts....	do .....	72	14	do do ..	L	Harbour.
do 28	Mary Storey .....	do .....	69	14	do do ..	L	Bait and ice.
Dec. 3	do .....	do .....	69	14	do do ..	L	Harbour.
do 7	Hattie M. Graham....	do .....	134	8	Gloucester ....	U	Harbour bound Nfld. for herring.
do 8	Chas. Levi Woodbury	do .....	100	8	do ..	U	do do
do 9	Mary Storey .....	do .....	69	14	Canso Bank ..	L	Ice, bait and supplies.
do 10	Dora A. Lawson....	do .....	119	8	Gloucester ....	U	Harbour bound Nfld. for herring.
do 14	*Mary Storey .....	do .....	69	14	Canso Bank ..	L	do home.

\*This schooner made up the best part of her trip on bait obtained from the freezer of A. N. Whitman & Son. The bait was squid frozen in metallic pans, and though somewhat costly at first, yet the fish caught thereon proved it to be a wise investment.

J. W. YOUNG.

## APPENDIX B.

LIST of United States Fishing Vessels which Visited Sand Point, Shelburne County, between 25th May and 31st December, 1891.

Date of Arrivals	Name of Vessels.	Port of Registry.	Tons.	Men.	Whence Arrived.	If Licensed L, if Unlicensed U.	What in Port for.
1891.							
May 25	Davy Crockett.....	Gloucester ..	80	17	Gloucester. .	U	Shelter-bound ; east, seining.
do 25	Lilla B. Fernald.....	Portland .....	78	17	Portland . . .	U	do do
do 27	Adeline Adams.....	Boston .....	26	3	Coast. ....	*	Buying live lobsters ; has 6,000.
Jan. 3	Unique.....	do .....	75	16	La Have Bank	U	Shelter and water; 20,000 fresh fish
do 3	Ella M. Doughty.....	Portland .....	71	14	Portland .....	L	Seeking bait.
do 3	Nellie G. Davis.....	Boston .....	36	3	Boston .....	*	Buying live lobsters.
do 3	Sea Fox.....	Gloucester.....	105	22	Roseway Ridge	U	25,000 fresh fish ; gone home.
do 8	Volunteer.....	do .....	102	15	Cape North....	U	Medical aid ; 40,000 salt fish.
do 8	Reub. L. Richardson	do .....	92	15	Gloucester....	U	Shelter-bound to western bank.
do 8	Coremba M. Kinquo-						
do 16	lant.....	New York.....	32	3	Greenport . . .	*	Buying live lobsters.
do 16	Ambrose H. Knight.	Booth Bay....	87	16	Louisburg, C.B	U	Seining ; bound west.
do 16	Coremba M. Kinquo-						
do 16	lant.....	New York.....	32	3	New York....	*	Buying live lobsters, 7,000.
do 16	Judith Ann.....	Boston .....	31	3	Boston .....	*	do 7,000.
do 16	Mary H. Smith.....	do .....	31	3	do .....	*	do 8,000.
do 22	Clara R. Harwoods ..	Gloucester.....	55	14	Brown Bank....	U	Bait spoiled, no license, gone home
do 18	J. R. Atwood.....	Boston .....	41	3	Port Matoon....	*	Seeking live lobsters.
do 18	Mary H. Smith.....	do .....	31	3	Lockeport.....	*	do
do 29	Nellie Dixon.....	do .....	105	17	Boston .....	L	Bound to western bank.
July 4	Willie M. Stevens.....	Gloucester ..	76	17	Gloucester.....	L	Bound to Canso for bait.
do 7	Annie L. Sanborn.....	do .....	33	11	do .....	L	Bound to Roseway.
do 7	Conductor .....	do .....	69	17	Eastport.....	L	Eastport, bait spoiled, seeking bait
do 8	Agnes E. Downs.....	do .....	80	17	Roseway .....	L	Bait spoiled ; seeking bait.
do 8	Gardner W. Tarr.....	do .....	63	15	do .....	U	Fresh fishing.
do 10	Edith L. Conley.....	do .....	55	13	do .....	U	do
do 10	M. S. Ayer.....	do .....	76	17	Gloucester.....	U	Bound to Roseway.
do 10	Rigel.....	do .....	107	17	Western Bank.	L	Tranship fresh fish & for ice & bait
do 13	Willie H. Oakes .....	do .....	67	14	Gloucester .....	L	Seeking bait.
do 14	Iolanthe .....	do .....	76	15	Quero .....	U	Landed a dead man.
do 20	Addie Winthrop.....	do .....	75	15	Roseway .....	L	Seeking lost men.
do 24	Lizzie I. Greenleaf.....	do .....	88	15	Gloucester.....	L	Fresh halibut trawler bait.
do 27	Conductor .....	do .....	69	15	La Have Bank	U	Seeking lost men.
do 27	Addie Winthrop.....	do .....	73	15	Roseway.....	L	Seeking bait.
do 27	Tubal Cain.....	do .....	60	15	do .....	U	Water.
do 29	Laurel.....	do .....	119	17	North Bay....	U	Seiner, bound home.
do 29	Augusta H. Johnson.	do .....	62	7	Gloucester.....	L	Seeking men.
do 29	A. M. Burnham .....	do .....	60	13	Roseway.....	U	Shelter.
do 29	Ella M. Doughty.....	Portland .....	71	14	La Have.....	L	Fresh halibut ; in for water.
Aug. 8	Eliza B. Campbell ..	Gloucester.....	95	15	Gloucester.....	L	do seeking bait.
do 10	Mathew Kenny.....	do .....	66	14	do .....	L	do do
do 10	Golden Hind.....	do .....	70	16	do .....	L	do do
do 10	Gladiator .....	do .....	107	16	do .....	L	do do
do 11	Sea Fox.....	do .....	105	22	Eastport.....	U	Water.
do 17	John Smith.....	do .....	62	12	Gloucester.....	U	In for lost dory.
do 24	Conductor .....	do .....	69	9	do .....	L	Bait, ice and men.
do 24	Flora Dilloway.....	do .....	77	15	do .....	L	Bait.
do 28	Blanch.....	do .....	79	15	do .....	L	Bait ; fresh halibut.
do 29	Sea Fox.....	do .....	105	22	do .....	U	To buy kerosene oil.
Sept. 2	Susie Hooper.....	do .....	73	15	do .....	L	Bait, ice, fresh fishing.
do 3	Mary Storey.....	do .....	60	13	do .....	L	do
do 3	Conductor .....	do .....	69	13	Liverpool.....	L	Bait and ice.
do 5	Penobscott .....	do .....	85	16	Gloucester.....	L	Bait and man.
do 7	Lucy Devlin.....	do .....	44	11	do .....	U	Shelter ; fishing on Roseway.
do 7	Annie Wesley.....	do .....	88	15	do .....	L	Seeking bait.
do 7	Sarah B. Putnam.....	Salem .....	76	12	Grand Bank....	U	Shelter and water.
do 9	Susie Hooper.....	Gloucester.....	73	13	La Have.....	U	Repairs.
do 7	Paul and Essie.....	do .....	63	13	Cape Negro....	U	Wrecked and got off ; wanted permit to tranship fish.



APPENDIX B.—List of United States Fishing Vessels which visited Sand Point, Shelburne County, between 25th May and 31st December, 1891—*Continued.*

Date of Arrivals	Names of Vessels.	Port of Registry.	Tons.	Men.	Whence Arrived.	If Licensed, L, if Unlicensed, U.	What in Port for.
1891.							
Sept. 11	Ernest F. Vonwood.	Gloucester....	70	15	Gloucester....	U	Repairs.
do 12	Gardner W. Tarr...	do .....	62	13	Western Bank	U	do
do 12	Tubal Cain.....	do .....	60	13	Gloucester....	U	Bait and ice.
do 14	Polar Wave.....	do .....	86	15	La Have.....	L	do
do 14	Sarah.....	do .....	69	13	Gloucester....	U	Shelter; fresh fishing.
do 16	Grace L. Fears.....	do .....	84	15	do .....	U	do do
do 18	Lizzie M. Stanwood.	do .....	100	15	Gloucester....	U	Fresh halibut; has 50 tons ice.
do 22	N. E. Simmonds....	Bucksport, Me	125	18	Grand Bank...	U	To land sick man.
do 23	Smuggler.....	Gloucester....	46	15	Western Bank	L	Bait and ice.
do 25	Elsie M. Smith.....	do .....	107	18	do .....	L	To buy oil.
do 28	Blanch.....	do .....	79	13	Gloucester....	L	Bait and ice; fresh halibut.
do 28	Polar Wave.....	do .....	86	14	La Have Bank	L	Bait and ice.
do 29	H. B. Griffin.....	do .....	117	18	Flemish Cap...	U	Water; has 275,000 lbs. green fish
do 29	Harry L. Balden....	do .....	117	22	Gloucester....	U	Fresh fisher.
do 30	Smuggler.....	do .....	64	13	La Have.....	L	Shelter.
Oct. 1	Conductor.....	do .....	69	14	do .....	L	In to land and pay off men; fresh fishing.
do 1	Brunhilde.....	do .....	90	15	do .....	L	Seeking ice.
do 3	Norumbega.....	do .....	120	17	Gloucester....	U	Shelter; mackerel seining.
do 5	Martha A. Bradley...	do .....	72	13	do .....	U	do fresh fishing.
do 6	Willie M. Stevens...	do .....	76	13	do .....	U	do
do 6	Caviare.....	do .....	59	13	do .....	U	do fresh fishing.
do 8	Polar Wave.....	do .....	86	14	La Have Bank	L	do
do 8	Willie H. Wellington	do .....	81	17	La Have.....	U	Fresh-fisher.
do 13	Wm. E. Macdonald	do .....	93	6	Gloucester....	*	Seeking cargo of herring.
do 13	Sarah.....	do .....	69	15	Roseway.....	U	Fresh fishing; shelter.
do 14	Abbie F. Morris....	do .....	77	12	La Have.....	U	Repairs.
do 14	Wm. H. Wellington	do .....	85	15	do .....	U	Shelter; fresh fishing.
do 13	A. R. Crittenden...	do .....	81	15	Gloucester....	U	do
do 14	Midnight.....	do .....	62	13	do .....	U	Repairs.
do 12	Ethel P. Boynton...	do .....	76	14	do .....	U	Shelter; fresh fishing.
do 12	Rigel.....	do .....	107	18	La Have.....	L	do do
do 12	D. D. Winchester...	do .....	79	7	Gloucester....	*	do Bay of Isld's salt herring.
do 12	Abbie F. Morris....	do .....	77	13	La Have.....	U	do and water.
do 12	Sigfrid.....	do .....	72	14	do .....	U	do fresh fishing.
do 12	Governor Butler...	do .....	87	15	Gloucester....	U	Mackerel seining; shelter
do 12	Ethel B. Jacobs....	do .....	125	18	do .....	U	Shelter; mackerel seining.
do 12	Commonwealth....	do .....	81	6	do .....	*	do to buy Nfld. salt herring.
do 12	W. H. Wellington	do .....	85	15	Roseway.....	U	do
do 12	Reub. L. Richardson	do .....	92	17	La Have.....	U	Fresh fishing; shelter.
do 17	Grace L. Fears.....	do .....	84	15	Western Bank	U	Shelter; fresh fishing.
do 17	Ada M. Hall.....	do .....	95	16	La Have.....	U	do salt and fresh.
do 19	Henry G. French....	do .....	95	15	Home.....	U	To land sick man;
do 19	Helen F. Whittier...	do .....	127	22	La Have.....	U	Shelter; fresh codfish.
do 19	James G. Blaine....	do .....	98	17	do .....	U	do fresh fishing.
do 19	Puritan.....	do .....	85	16	Gloucester....	U	do western bank.
do 21	Gertie Evelyn.....	do .....	81	13	La Have.....	U	Fresh fishing; shelter.
do 21	Quickstep.....	do .....	99	19	Gloucester....	U	Shelter; fresh fishing.
do 22	Bluejacket.....	do .....	110	15	Grand Bank...	U	do and water.
do 23	Helen F. Whittier...	do .....	127	22	La Have and Roseway...	U	do fresh fishing.
do 23	Bessie M. Wells....	do .....	92	15	La Have.....	U	Fresh fishing; shelter.
do 23	Carrie E. Parsons...	do .....	80	15	do .....	L	do
do 23	Thos. F. Bayard....	do .....	95	15	do .....	U	do
do 23	Caviare.....	do .....	59	13	Gloucester....	U	do
do 24	America.....	do .....	118	19	do .....	U	do
do 24	Annie C. Hall.....	do .....	84	13	do .....	U	do
do 24	A. R. Crittenden...	do .....	81	13	do .....	U	do
do 24	Quickstep.....	do .....	99	19	Roseway.....	L	do
do 24	James and Ella....	do .....	85	17	Shore.....	L	do
do 24	Sea Fox.....	do .....	105	22	do .....	U	do
do 26	Grace L. Fears.....	do .....	84	15	Gloucester....	U	do

\*Trader.

APPENDIX B.—List of United States Fishing Vessels which Visited Sand Point, Shelburne County, between 25th May and 31st December, 1891—*Continued.*

Date of Arrivals	Name of Vessels.	Port of Registry.	Tons.	Men.	Whence Arrived.	If Licensed, L, if Unlicensed, U.	What in Port for.
1891.							
Oct. 26	Brunhilde .....	Gloucester....	90	15	La Have Bank	L	Repairs and stores.
do 26	Robert J. Edwards..	do .....	80	14	do ..	U	Shelter.
do 26	James and Ella .....	do .....	85	17	do ..	U	Fresh fishing; shelter.
do 27	Sea Fox .....	do .....	105	22	do ..	U	Shelter; fresh fishing.
do 27	Frank A. Rackliff..	do .....	99	17	Flemish Cap..	U	do water and stores for home
do 27	Hattie Evelyn.....	do .....	66	13	Gloucester....	L	Fresh fishing; shelter.
do 27	Thos. F. Bayard....	do .....	95	15	La Have.....	U	do do
do 27	Champion .....	do .....	64	13	Shore .....	U	do do
do 28	Sea Fox .....	do .....	105	22	do .....	U	do do
do 28	Champion .....	do .....	64	13	do .....	U	do do
do 28	Gerty Evelyn.....	do .....	66	13	do .....	U	do do
do 28	James and Ella .....	do .....	85	17	do .....	L	do do
do 28	Thos. F. Bayard....	do .....	95	15	do .....	U	do do
do 28	Robert J. Edwards..	do .....	80	14	La Have Bank..	U	Repairs.
do 28	America .....	do .....	118	19	do .....	U	Shelter; fresh fishing.
do 28	O. A. Whitten.....	do .....	127	22	do .....	U	do do
do 29	Susie Hooper.....	do .....	73	15	Brown's Bank..	L	do and supplies, fresh fishing.
do 29	Bertha May .....	do .....	75	13	Canso Bank ..	L	do wood and water.
do 30	Margaret Mather....	do .....	91	15	Quero Bank....	L	do do
do 30	Mystery .....	do .....	114	18	Grand Bank....	U	do and stores, for home.
do 30	Annie R. Woods....	do .....	84	15	Brown's Bank..	U	do and repairs.
do 30	Golden Hind .....	do .....	101	18	Grand Bank....	U	do and stores, for home.
do 31	Abbie F. Morris....	do .....	77	13	La Have.....	U	do fresh fishing.
do 31	Nellie G. Thurston..	do .....	81	13	Shore .....	U	do do
Nov. 2	James and Ella .....	do .....	85	17	Roseway .....	L	do do
do 2	Champion .....	do .....	64	13	do .....	U	do do
do 2	Carrie E. Parsons....	do .....	80	15	La Have.....	U	do do
do 2	R. J. Edwards .....	do .....	80	14	Shore .....	U	do do
do 2	Thos. F. Bayard....	do .....	95	15	Roseway .....	U	do do
do 3	A. R. Crittenden....	do .....	81	15	Gloucester....	U	do do
do 3	Margaret Mather....	do .....	91	15	Shore .....	U	do do
do 3	Howard Holbrook....	do .....	92	16	Grand Bank....	U	do salt fisher.
do 3	David A. Story .....	do .....	86	13	La Have.....	U	do do
do 3	H. B. Griffin .....	do .....	117	7	Gloucester....	*	Nfld., to buy frozen herring.
do 3	Abbie F. Morris .....	do .....	77	13	Ridge .....	U	Shelter, fresh fishing.
do 7	Reporter .....	do .....	79	15	Flemish Cap..	U	do salt fisher.
do 7	Howard Holbrook....	do .....	92	16	Shore .....	U	do do
do 7	Penobscot.....	do .....	?	?	.....	U	Only in port for a night.
do 11	Caviare .....	do .....	59	13	Shore .....	U	Shelter, fresh fishing.
do 12	Abbie F. Morris .....	do .....	77	13	La Have.....	U	do and repairs, fresh fishing.
do 13	Electa A. Eaton .....	do .....	73	14	Scattarie .....	L	Came in to land men.
do 16	Ada M. Hall.....	do .....	95	15	Gloucester....	U	Land, sick man.
do 16	Caviare .....	do .....	59	13	La Have.....	U	Shelter, fresh fishing.
do 17	American .....	do .....	118	19	Cape Negro....	U	do do
do 17	Reub. L. Richardson	do .....	92	19	La Have.....	U	do do
do 18	Sam. R. Crane .....	do .....	74	14	do .....	L	Seeking medical aid.
do 18	Nellie G. Thurston..	do .....	81	13	Gloucester....	U	Shelter, fresh fishing.
do 21	Joseph Rowe.....	do .....	127	7	do .....	*	Nfld., for frozen herring.
do 21	Nellie Dickson .....	Boston .....	105	7	Boston .....	*	do do
do 23	Mildred V. Lee .....	Gloucester....	102	7	Gloucester....	*	do do
do 23	Maria Theresa.....	Boston .....	52	6	Boston .....	*	do do
do 23	Fred P. Frye .....	Gloucester....	81	7	Gloucester....	*	do do
do 24	Roulette .....	do .....	79	15	La Have.....	U	Shelter, fresh fishing.
do 26	A. R. Crittenden....	do .....	81	15	do .....	U	do do
do 27	Davy Crockett.....	do .....	80	14	Cape Breton..	U	do mackerel seining.
do 27	Norumbega.....	do .....	120	8	Gloucester....	*	Bound to Nfld., for herring.
do 28	A. R. Crittenden....	do .....	81	11	La Have.....	U	Shelter, fresh fishing.
do 29	Sea Fox .....	do .....	105	22	Roseway .....	U	do do
do 29	Abbie F. Morris....	do .....	77	13	La Have.....	U	do do
Dec. 1	Edith M. Prior.....	do .....	105	19	Roseway .....	U	do do
do 1	Roulette .....	do .....	79	15	Little Hope..	U	do do

\*Trader.

APPENDIX B.—List of United States Fishing Vessels which visited Sand Point, Shelburne County, between 25th May and 31st December, 1891.—*Concluded.*

Date of Arrivals	Name of Vessels.	Port of Registry.	Tons.	Men.	Whence Arrived.	If Licensed, L; if Unlicensed, U.	What in Port for.
1891.							
Dec. 2	Sea Fox .....	Gloucester....	105	22	Roseway .....	U	Shelter; fresh fishing.
do 2	Reub. L. Richardson	do .....	92	19	do .....	U	do do
do 2	Procyon .....	do .....	107	18	Brown's .....	U	do do
do 5	Caviare .....	do .....	59	13	La Have .....	U	do do
do 5	Thetis .....	do .....	92	18	do .....	U	do do
do 5	Hattie M. Graham..	do .....	133	7	Gloucester....	*	Newfoundland for frozen herring, to buy lumber here.
do 5	C. Levi Woodbury..	do .....	100	7	do .....	*	Bound to Nfld. for frozen herring.
do 5	Nellie W. Davies ..	do .....	89	18	La Have .....	U	Fresh fishing.
do 7	Nellie G. Thurston ..	do .....	81	13	do .....	U	Land a sick man; fresh fishing.
do 7	Caviare .....	do .....	59	13	do .....	U	Shelter; fresh fishing.
do 7	Thetis .....	do .....	92	18	do .....	U	do
do 9	America .....	do .....	118	18	do .....	U	do
do 9	Edith Walen .....	do .....	78	15	Roseway .....	U	do
do 9	Edith M. Prior .....	do .....	105	20	Gloucester....	U	do
do 11	Grace L. Fears .....	do .....	84	15	Western Bank ..	U	do
do 12	John M. Plummer ..	Portland, Me.	95	18	Gloucester....	U	do
do 12	James and Ella .....	Gloucester....	85	17	Little Hope .....	L	do
do 14	Nellie G. Thurston ..	do .....	81	13	Western Bank ..	U	Repairs; sailed for home.
do 14	Oresa .....	do .....	82	15	do .....	U	Shelter; fresh halibut.
do 14	Sarah .....	do .....	69	15	Gloucester....	U	Shelter; fresh fishing.
do 14	America .....	do .....	118	19	do .....	U	do
do 15	James and Ella .....	do .....	85	17	do .....	L	do
do 16	Oresa .....	do .....	82	15	Western Bank ..	U	do
do 16	Bertha May .....	do .....	75	13	Shore banks ..	L	Fresh and salt, shelter, ice and supplies.
do 16	S. F. Maker .....	do .....	104	17	Roseway .....	U	Shelter; fresh fishing.
do 16	Edith M. Prior .....	do .....	105	20	La Have .....	U	do
do 16	Sarah .....	do .....	69	15	Shore banks ..	U	do
do 16	Lucy W. Dyer .....	Portland .....	78	15	Roseway .....	L	do
do 16	Reub. L. Richardson	Gloucester....	92	18	La Have .....	U	do
do 17	Laura Belle .....	Portland .....	77	17	do .....	U	do
do 17	Sylvester Whalen ..	Boston .....	111	21	Gloucester....	U	do
do 17	Mabel Kenniston ..	Gloucester....	78	14	Roseway .....	L	do
do 18	Reub. L. Richardson	do .....	92	18	La Have .....	U	do
do 18	Lawrence Murdoch ..	do .....	63	12	Ridge .....	U	Salt fishing; found fish and squid plentiful, was hand lining from the deck.
do 19	Sylvester Whalen ..	Boston .....	111	21	Shore .....	U	Shelter; fresh fishing.
do 20	Thetis .....	Gloucester....	92	18	Gloucester....	U	Medical aid.
do 24	J. H. Carey .....	do .....	95	17	Roseway .....	U	Shelter and water.
do 25	James and Ella .....	do .....	85	17	Shore .....	L	do fresh fishing.
do 25	Thetis .....	do .....	92	18	do .....	U	do do
do 25	A. R. Crittenden ..	do .....	81	17	La Have .....	U	Shelter; fresh fishing.
do 25	Thurston .....	do .....	81	13	do .....	U	do
do 28	Gov. Butler .....	do .....	87	17	do .....	U	In to land a sick man.
do 28	Lillie Vorwood .....	do .....	78	15	do .....	U	do
do 28	Mabel Kenniston ..	do .....	78	14	do .....	L	Shelter; fresh fishing.
do 28	Sussie Hooper .....	do .....	73	15	do .....	L	do
do 29	Nellie M. Davis .....	do .....	89	17	do .....	U	Shelter; salt and fresh fishing.
do 29	Abbie F. Morris .....	do .....	77	13	do .....	U	Shelter; fresh fishing.
do 29	A. R. Crittenden ..	do .....	81	15	do .....	U	do
do 30	W. E. Macdonald ..	do .....	98	5	Bay of Islands ..	*	1,025 brls. salt herring; shelter.
do 30	Gov. Butler .....	do .....	87	17	La Have .....	U	Shelter; fresh fishing.
do 30	Susie Hooper .....	do .....	73	15	do .....	L	do
do 30	Mabel Kenniston ..	do .....	78	14	do .....	L	do
do 30	M. S. Ayer .....	do .....	76	15	do .....	U	do
do 31	Ernest Vorwood .....	do .....	70	13	Gloucester....	U	Bound to Western Bank; repairs.
do 31	Edith M. Prior .....	do .....	105	20	do .....	U	Shelter, fresh fishing.



## APPENDIX C.

FISHERIES INTELLIGENCE BUREAU,  
HALIFAX, N. S., 17th December, 1891.Lieut. A. R. GORDON, R.N.,  
Department Marine and Fisheries,  
Ottawa.

SIR,—I have the honour to submit the annual report of the Fisheries Intelligence Bureau for the season 1st May to 31st October, 1891.

## MOVEMENTS OF THE FISH—LOBSTERS.

## ANTICOSTI.

Reporters were not secured for this district until the latter part of June, about which time a heavy storm prevailed, and the first report received indicated great destruction of traps all over the coast, and entire suspension of fishing operations.

In the first week of July, however, fishermen began to repair their fishing gear, and a few good hauls were made during the first part of the month at Fox Bay and Ellis Bay.

## QUEBEC.

*Percé*.—Lobsters seemed, as a rule, plentiful during the whole month of May; fair the first half of June, but none the latter, owing to very stormy weather.

A few appeared again, however, about 1st July.

*Grand River*.—Very much the same as *Percé*, excepting that the fish were not taken in July.

*New Port Point*.—Reporter not secured until June, during the first half of which month lobsters were reported fairly plentiful. None afterwards.

*Paspebiac*.—None reported during the season.

## NEW BRUNSWICK.

*Caraquet*.—The first appearance of lobsters reported was on 14th May, from which date until the end of the month they remained fairly plentiful. In the first week of June they were very plentiful, but owing to damage to gear by the storms in the latter part of the month, but few were subsequently taken.

*Shippigan*.—First appearance about 16th May, and continued very plentiful until about the middle of June, when they began to fall off daily. In the last week of June, all the traps being destroyed by the storm, the fishing was suspended.

In July a few factories repaired their traps, and some fair catches were made on the 17th, 18th and 19th.

*Escuminac*.—Appeared first about 11th May, and remained in abundance until the middle of June—especially about the latter part of May and first of June, when many of the factories were reported over-stocked.

*Campobello*.—Fair catches reported from 15th May to 30th.

## PRINCE EDWARD ISLAND.

The first appearance of lobsters on this coast was on 6th May, when a few were taken at Miminegash, North Cape, Tignish and Alberton. From 9th May until the end of the month the lobster fishery was very successful from Miminegash round the coast to Alberton, especially at the former, where it was reported better than it had been for ten years. In the first week of June the catches at these stations were only poor, and after that time almost nothing was done.

In the vicinity of Malpeque the first appearance noted was on 16th May, the average catch being about 700 lobsters per boat, at which it continued until 20th May, when it rose to about 1,200 per boat, and remained so until the end of the

month. In the month of June and the first two weeks in July the catches only poor, excepting the week ending 20th June, in which they averaged 1,200 per boat.

During the last two weeks of the season the average haul was 800 per boat.

Some good hauls were made off Panmure and Boughton Islands from 1st to 10th June, and a few were taken each day throughout the month of July in the vicinity of Georgetown.

On the whole, reports go to show that the Prince Edward Island lobster catch for this season has been the most successful of any season for the past ten or twelve years.

#### CAPE BRETON.

*Port Hood.*—Lobsters first reported on 11th May, and continued fairly plentiful until the 25th, after which date until the end of the month they were quite plentiful.

During the months of June and July the catch was regular and constant, but small.

*Mabou.*—Some good hauls were made in the last week of May and first two weeks of June. In July the average catch was fair.

*Margaree.*—Very few reported in May, but in the former part of June and latter half of July the fishing was quite successful.

*Cheticamp.*—Good hauls were made in the first week of June, but after that date the catch was irregular and only fair.

*Meat Cove.*—No fishing in May owing to presence of ice. Some good hauls of lobsters were taken in the first part of June and first and last weeks of July.

*Ingonish.*—First appearance of lobsters on 20th May, and fair catches were made during the remainder of the month. In the first and third weeks of June the catch was fair, but in July poor and irregular.

*Englishtown.*—Lobsters were very plentiful throughout the whole of June, but none were taken in May and very few in July.

*North Sydney.*—None reported.

*Louisburg.*—First appearance of lobsters about 12th May, and until the 21st the catch averaged about 400 per boat, after which it became somewhat larger and continued so the rest of the month. During the first half of June, also, it was pretty good but afterwards only poor.

*L'Ardoise.*—None reported in May. In the first week of June the catch was quite good, but latterly, though regular enough, was rather small.

*St. Peters.*—Lobsters were reported plentiful throughout the whole month, of May, although during the former part the catch was often poor, owing to want of bait. In the first week of June the catch was sometimes good, and in the second week of July fair; but on the whole, during these months, it was very irregular and rather poor.

*Port Hawkesbury.*—First appearance of lobsters reported on 11th May, from which time until the last of the month they were reported fairly plentiful.

*Arichat.*—The lobster catch for the whole season is reported fair. From 1st to 13th May it was quite good, and for the remainder of the month varied from fair to good.

*West Arichat.*—It is generally agreed that lobsters have been more plentiful this season than for the past eight or nine years.

#### NOVA SCOTIA.

*Bayfield.*—The catch of lobsters for the season good.

*Canso.*—First appearance on 8th May, and until 10th June good catches were made. None reported afterwards.

*White Head.*—Lobsters first appeared about 6th May and remained in fair quantities until 22nd May; but after this the catch was irregular and poor.

*Isaac's Harbour.*—There was an abundance of lobsters throughout the whole month of May; also some fine hauls were made in the first and third weeks of June, but none reported taken at any other time.



*Spry Bay*.—First appearance reported on 13th May. From 15th May until the last of the month they were taken each day in fair quantities. Throughout the first half of June the catch was constantly good, but very few were taken in the latter half, and none in July.

*Musquodoboit Harbour*.—Some very good hauls were taken in the first and third weeks of June. No further reports.

*Lunenburg*.—No lobsters reported, excepting a few about 19th and 20th June.

*Port Medway*.—Lobsters reported plentiful on 12th May, but since that time the reports have been remarkably few. In the third week of June the catch was from fair to good.

*Liverpool*.—First report received 9th May indicated lobsters plentiful in this vicinity; but during the remainder of the month the catches reported were only fair. From 11th to 18th June the catch was again reported good.

*Lockeport*.—Throughout the whole season lobsters were found in large numbers, the catch for this season being estimated as larger than that of any previous year.

*Sand Point*.—Lobsters, as far as reported, were generally plentiful.

*Port la Tour*.—Reports received indicate a good quantity of lobsters for the first week of May, and fair for the last. A few good catches also in June.

The catch for the whole season is estimated at about 25 per cent over that of last season.

*Pubnico and John's Island*.—First reports received indicate an abundance of lobsters in the last week of May. They were also very plentiful for some time about the middle of June.

*Yarmouth*.—During the whole month of May and the first of June lobsters were reported very plentiful.

*Digby*.—First appearance reported on 9th May, after which time they continued exceedingly plentiful until about 18th June, when they began to fall off at Digby, but were still reported very plentiful from Briar Island to Black Rock.

On the whole, the reports seem to indicate that in New Brunswick, Prince Edward Island and Nova Scotia the success of the lobster fishery for this season has been much above the average, and in Cape Breton not below. Especially does this seem true in the case of those fishing districts in the vicinities of Point Escuminac, Miminegash, and the counties of Shelburne, Yarmouth and Digby, where it is claimed that the catch is the largest that has been for ten or twelve years, the oldest fishermen in the districts having no recollection of the time when lobsters were so plentiful or of so large a size.

## CODFISH.

### ANTICOSTI.

*English Bay*.—First appearance reported 25th June, and fair catches were made until the 30th.

The fish appeared scarce from this date until 11th July, when they swarmed in great numbers but would not take the hook.

Few good catches were made during the season, owing chiefly to the great scarcity of bait.

*Fox Bay*.—In July the cod fishery was very unsuccessful, the good catches reported being on the 17th and 18th. In August, when bait became available, the catch was on the average very good. None reported in September and October.

*South West Point*.—A few good hauls were made in the second week of August, and poor ones regularly during the first two weeks of September. The great obstacle to the fishery seemed to be want of bait.



## QUEBEC.

Reports were not secured for the more northern districts of Quebec until late in June.

*Thunder River.*—Codfish were reported quite plentiful from 30th June, which was the first report until the last of August.

In September the catch was very irregular and on the average small.

*River St. John.*—Very much the same as Thunder River, excepting that the fish continued quite plentiful until 17th September.

*Long Point.*—Codfish were reported *very* plentiful throughout the whole of July; plentiful 1st to 21st August, fair 21st August to 18th September, and scarce from that date until 2nd October, when the fishing season was reported closed.

*Seven Islands.*—First appearance on 7th July. From 9th to 18th July the catch each day was very good; but after that it began to be irregular and at best only fair.

*Sheldrake.*—In the second and fourth weeks of July the catch was very good, and throughout August on an average pretty good; but in September it was much more irregular and only fair.

*Moisie.*—During the latter half of July and the first week of August the catch was very good, but was only fair during the remainder of August and up to September 10th, when the fishing ceased.

*Magpie.*—Good catches reported in the latter part of July and first week of August; during the remainder of August and the whole of September only fair. Nothing done in October.

*Percé.*—First appearance about 1st June, and for the first half of the month continued fairly plentiful. In July and first half of August the average catch was fair.

In September it was fair and in the first week of October, good; but at all other times, though quite regular, was rather small.

*Grand River.*—From 1st to 15th June the cod fishing was fair, but from that out very little was done either inshore or on the Banks. Rough weather and scarcity of bait seemed a great obstacle.

*Newport Point.*—In the first week of June the cod fishery was a success, but for the remainder of the month a failure.

From 1st July until about the middle of October the catch was on an average fair.

*Paspebiac.*—Some good catches from the 11th to the 17th June, but poor for the rest of the month and throughout the whole of July.

In August and September the fish seemed plentiful, but successful catches were prevented by want of bait. From 10th to 20th October the catch was good.

## NEW BRUNSWICK.

*Caraquet.*—During the first half of June the Caraquet fishermen as a rule did fairly, having made two or three extra good hauls. In July the catch was unusually poor. From 8th to 15th August cod were reported abundant off Caraquet, and in September the fishermen made some good fares off Prince Edward Island.

*Shippigan.*—The average catch is reported at about one-fourth in excess of that of last season.

*Escuminac.*—The fishermen here being devoted to mackerel the cod fishery was not prosecuted to any extent, in consequence of which the catch was only small, although it is not doubted that the fish were on the grounds.

## PRINCE EDWARD ISLAND.

*Miminegash.*—Codfish reported very scarce throughout the whole season.

*Alberton.*—Some good catches were made about the middle of June. In July the fishery was poor and in September it varied from fair to poor.

*Malpeque.*—The catch for the whole season was unusually small. The best catches, which were only fair, were made in the last week of July and throughout August. In October, the month on which the cod fishermen for the most part depend, the fishery was a total failure.

*Souris.*—Codfish reported scarce up to 24th June, when they appeared in great numbers and remained so until about 9th July. After this very few were reported.

*Georgetown.*—Codfish struck in on 3rd June, but none reported taken until July, for the first week of which the catch was very good, but for the remainder of the month and for the whole month of August poor. Throughout September the catch was usually better.

#### CAPE BRETON.

*Port Hood.*—First appearance about 25th May, from which date until about the middle of September the catch was fair. In the last part of September and in October the rough weather prevented fishing.

*Mabou.*—The catch, as reported, much below the average, but probably due to the great amount of bad weather and the fact that the fishery was not attended to.

*Margaree.*—The catch of cod was on the whole poor, yet the fishermen say that most of the time the fish were plentiful and that good catches would have been made had the weather been favourable.

*Cheticamp.*—First catch of cod on 19th May. Average catch for the season poor.

*Meat Cove.*—Cod fishery very poor throughout the whole season.

*Ingonish.*—Here, also, it was very poor; one great drawback reported being great scarcity of bait in August, September and October.

*St. Ann's.*—Cod fishing poor all season.

*North Sydney.*—The cod fishery a failure, owing to these two facts: In the spring bait was not obtainable, and again, when bait was obtainable, the weather was unfavourable.

*Louisburg.*—First appearance about the first of June, during which month fair catches were made, but poor afterwards.

*L'Ardoise.*—The catch of cod for the whole season is reported a failure. It was good from the 11th to 19th of June, and 1st to 8th of July; fair the remainder of July, but very poor afterwards.

*St. Peter's.*—The cod fishery in this locality poor, but vessel fishermen from this place report themselves to have done as well as, if not better, than last year.

*Arichat.*—Reported struck in on 8th May, but few were taken until the month of June, the first half of which the catch was fair. In July, August and September the catch on the whole averaged fair.

*West Arichat.*—The catch, though not large, compares favourably with that of last year.

In June and July, if the fishery could be attended to, it would be good; but during these months the fishermen are busily engaged in the lobster and net fisheries.

#### NOVA SCOTIA.

*Canso.*—During June and the former half of July the cod fishery was fair; from the middle of July to last of August good; and throughout September fair.

*White Head.*—From the 1st June until the middle of August the catch averaged between poor and fair, but after that it was impossible to get fish, on account of the rough and changeable weather.

*Isaac's Harbour.*—Some codfish taken for the first time in the last week of May. Throughout the whole season the catch was very irregular and at best only fair.

*Spry Bay.*—Some fair catches were made in the latter part of May and first half of June. In the latter half of July and throughout August the catch averaged a little better, but during the intermediate and remaining parts of the season very few were taken.

*Musquodoboit Harbour.*—Cod appeared in the latter part of May, and fair catches were made throughout the season when weather permitted.



*Lunenburg.*—The shore cod fishery was poor from 1st June to 26th, when for a week it was good. In July, again, it was poor, but throughout August and September good. The total catch of bankers is reported below that of last year, although some of them did remarkably well.

*Port Medway.*—Fish seemed plentiful most of the season, especially 18 to 20 miles off shore; but scarcity of bait and presence of dogfish interfered very materially with the catch.

*Liverpool.*—The inshore fishery was only fair; but in June the fish were reported very plentiful 18 to 20 miles off shore.

*Lockeport.*—Codfish appeared early, about 6th May, and were taken in fair quantities until the end of the month; but for the remainder of the season were very scarce, excepting in September, when they were more plentiful. The large vessels of the Banking fleet have made the best returns for the past three seasons, and the smaller ones engaged in the shore Bank fishery did fairly, their catches being fully as good as that of last season.

*Sand Point.*—The cod fishery did fairly up to the end of August. In September and October, with the exception of very good hauls on the 8th, 9th and 10th of the latter, the catch, as far as reported, was very poor.

*Port la Tour.*—Codfish appeared early in May, and small catches were made throughout the season. The catch for the whole season is estimated as very poor, not being over two-thirds of the average; and particularly noticeable was the lack of large fish.

*Pubnico.*—The average catch of cod and scale fish for the season is reported at about 1,100 quintals for each vessel.

*Cape Fleet.*—Fair catches of cod reported first in last week of May. In June, July and first week of August the catch was on an average very good.

*Yarmouth.*—The catch of cod throughout the whole season was very irregular and very poor.

*Digby.*—First appearance on 8th May and small catches were made throughout the season.

#### MAGDALEN ISLANDS.

The first appearance was about the middle of June; but owing to the prevalence of "la grippe" the fishermen were unable to attend to them. In July the fish struck in again in very large numbers, but the catch was not correspondingly large, owing to rough weather.

The catch for the whole season is estimated as fair.

#### HADDOCK.

##### PRINCE EDWARD ISLAND.

Small catches reported quite regularly in August at Georgetown.

##### CAPE BRETON.

Fair catches for the whole season at Port Hood, Margaree, Arichat and West Arichat.

At Ingonish, out of the school which generally arrives in June, only half of the average catch was made.

##### NOVA SCOTIA.

The haddock fishery has been reported good at Dover Bay, Whitehead, Lunenburg, Lockeport, Port la Tour and Digby, especially at Digby, where throughout the months of July and August excellent hauls were made.

##### NEW BRUNSWICK.

The haddock catch for the season is reported good at Campo Bello and Beaver harbour.



## HAKE.

## PRINCE EDWARD ISLAND.

Hake were reported abundant at both Souris and Georgetown during the latter half of July, and at Georgetown from 10th to 23rd September.

## NOVA SCOTIA.

At Digby hake were very plentiful from the middle of May until the last of August; but in September the catch was much more irregular though perhaps quite as large.

## NEW BRUNSWICK.

At Campo Bello and Beaver harbour the catch of hake for the season was good.

## HERRING.

## ANTICOSTI.

Some very good catches were reported at English and Fox Bays, 9th to 16th of July, and some small ones 1st to 7th of August.

## QUEBEC.

The only stations in Quebec from which the reports of herring were regular enough to be noted are the following:—

*Percé*.—The fish were reported present as early as 1st May, but good catches were not made until the 5th, from which time until the end of the month the fishery was quite successful. In the months of June and July the herring were usually scarce, excepting from 18th to 21st of the latter, when they were both very plentiful and very large; and during the remainder of the season the catches were exceedingly few.

*Grand River*.—Much the same as Percé, excepting that the good catches were fewer.

*Paspébiac*.—Small catches were made pretty regularly from 1st May to 7th August. A very large school struck in again on 13th October and excellent catches were made each day for about a week.

*Newport Point*.—Fair catches were made in the first week of June and first part of July, but as a rule the fishery was poor.

## NEW BRUNSWICK.

*Caraquet*.—Herring were reported plentiful throughout the first half of May, scarce the latter and none afterwards.

*Shippigan*.—A few herring appeared for the first time on 30th April; but no good catches were made until the 10th of May, from which time until the end of the month, with the exception of a few stormy days, fairly large quantities were taken. None reported afterwards.

*Escuminac*.—From the 10th to the last of May the average catch was fair.

## PRINCE EDWARD ISLAND.

*Miminegash*.—Herring struck in here about 25th April. Good catches were made round the coast to Alberton during the first half of May, but in the latter only poor. None reported afterwards.

*Malpeque*.—Herring appeared about 10th May, and during the month the fishermen obtained all they required for bait and home use. None exported.

*Souris*.—The only catches reported, which were very good, were from the first to last of July.

*Georgetown.*—Herring were reported plentiful from the 1st to 22nd of May. On 8th May and for some time after, the quantity was unprecedented; over 150 sail of vessels in the harbour being unable to take half the herring bait offered for sale. Again, from 1st to 10th June herring were reported quite plentiful off Panmure and Boughton islands, and small catches were made each day throughout July.

## CAPE BRETON.

*Port Hood.*—The catch of spring herring which struck in about 10th May is reported good.

*Mabou.*—Catch for the season poor.

*Margaree.*—The catch of herring this season reported about 10 per cent over that of last year.

*Cheticamp.*—The only reports of herring received were of small catches each day during the first half of July.

*Meat Cove.*—The first herring of the season were taken 16th May. The whole catch is reported below the average.

*Ingonish.*—Here also the herring fishery, for this season, is reported a failure.

*St. Anne's.*—Good catches 5th to 17th May; poor, 17th to 30th. From 26th June to 6th July the catch was fair; 20th to 25th July, very good; poor 25th to 31st.

*North Sydney.*—Very few herring reported during the season; about the only reports being:—Struck in 4th July and good catches for a few days; struck in again 20th July and fair catches for a few days.

*Louisburg.*—Herring catch for the season poor; all net fishing having been prevented after 15th August by the presence of dogfish.

*L'Ardoise.*—Herring catch for the season a total failure.

*St. Peter's.*—Catch for the season considerably below the average. During the month of May herring were reported quite plentiful in Bras d'Or Lake.

*Arichat.*—Herring struck in early in May and fair catches were made all along until the end of July. In August the catch was quite as large but very irregular. In the first three weeks of September again the fishery was more successful, especially 10th to 17th, when some fishermen occasionally took as many as 20 barrels per boat.

*West Arichat.*—The catch of herring as a rule ranged from 10 to 30 barrels per boat, according to the gear used. The summer herring reported not so plentiful as some years ago. In September none reported here, but large quantities reported taken four or five miles south.

## NOVA SCOTIA.

*Canso.*—Herring appeared about 29th May and good catches were made about that date, but throughout June very few were reported. In July good catches of large fat herring were made at Canso and Dover Bay. During the first three weeks of August the fishery was fair; last week of August and 10th to 17th of September very good.

*White Head.*—Herring first taken about 15th May, and light catches were reported throughout the season.

*Isaac's Harbour.*—During the latter part of July fair catches of herring of very fine quality were reported, but otherwise the catch was very light.

*Musquodoboit Harbour.*—The catch of herring for the season is estimated at about the same as that of last season.

*Lunenburg.*—The total catch for the season is large. The fish appeared about the last of May and remained in greater or less quantities until the last of September. The best catches were made:—1st to 14th June, 1st to 16th July, 7th to 14th August, and 12th to 28th September.

*Port Medway.*—Herring reported struck in for the first time 3rd July, and good catches were made for the first half of the month. Again, very good catches were made 10th to 17th September.



*Liverpool*.—Herring reported plentiful inshore on 30th May, but during June there were no reports. Some good hauls were made during the latter half of July and former half of August with drag seines.

*Lockeport*.—From June, when the fish first appeared, up to date, which finds them still running in the bays plentifully, the herring fishery has been excellent, the catch being reported in excess of that of any season since 1885.

*Sand Point*.—Herring, as far as reported, seemed plentiful; but dogfish prevented the success of the fishery to a great extent. On 5th August, the day after dogfish struck off, 1000 brls. were taken, and very good catches were made throughout the remainder of the month.

*Port la Tour*.—Herring seemed fairly plentiful, but the catch has been very irregular and uncertain, as the fish seemed to be continually shifting about. Some attribute this to the excess of lobster bait fouling the grounds, and others to the fact that nets are left in the water both day and night for weeks in succession, which drive the fish from their haunts and prevent them from entering the harbours in large schools.

*Yarmouth*.—Herring struck in about 19th May and small catches were made at times throughout the season.

*Digby*.—Struck in 28th May, and until the end of September fair catches were pretty regularly secured.

#### MAGDALEN ISLANDS.

Herring struck early in May and pretty good catches were reported throughout the season.

#### MACKEREL.

The most northern district from which reports of mackerel were received was New Brunswick.

#### NEW BRUNSWICK.

*Caraquet*.—The only period during which mackerel were reported here was 18th to 25th July, when they were reported schooling in the harbour in large numbers, but not taking hooks freely, owing to strong currents.

*Shippigan*.—The first good appearance of mackerel was noted on 7th July. On the 10th they struck in abundantly and lined the shores in swarms, from which excellent hauls were taken daily until the end of the month. In the second week of August again fair catches were reported. Few reports were received after this; but the whole season's fishing is estimated as having been better than for many years, large quantities having been pickled and shipped to the United States, while the freezers remain full for winter shipment.

*Escuminac*.—Struck in 14th July and continued to take hooks freely up to the middle of September. The total catch here also is reported extra good, all the freezers being full and a large number salted.

*Campo Bello*.—Mackerel struck in on 27th July and good catches were reported up to October.

#### PRINCE EDWARD ISLAND.

*Miminegash*.—Mackerel appeared as early as 23rd June, but did not take hooks freely until 6th July, from which time until 25th July good catches were reported daily. In the last week of July and during the greater part of August the catch was reported very poor, but throughout September and up to 10th October it was much better. The total catch is estimated as fair.

*Tignish*.—Along the coast from Miminegash to Tignish the mackerel hooking was much the same as at the former place, excepting at these stations it was more successful in August and that the fish did not remain so late, having left the shores about the middle of September.



*Alberton.*—Here also the mackerel fishing comes under the same description as that of Tignish, excepting perhaps that the fish appeared earlier—about 18th June.

*Malpeque.*—First mackerel appeared about 8th July, from which time until the close of the season, about the middle of September, the daily catch was usually poor. The total catch for the season is reported up to the average, but the fish of much smaller size.

*Souris.*—Mackerel first struck in 13th June, but no good catches were made until July, during the first half of which the fishery was quite successful. In the latter part of July, throughout August and first week of September, very few were reported; but from 10th to the 18th August, which was the end of the season, the catch was good.

*Georgetown.*—Mackerel struck in about 1st July and light catches were reported daily throughout July, August and September.

#### CAPE BRETON.

*Port Hood.*—Mackerel appeared in the first week of June, and small catches were reported pretty regularly until the 8th August. Again, during the first two weeks of September light hauls were taken daily. Total catch not up to the average.

*Margaree.*—A mere sprinkling of mackerel was taken during the season.

*Meat Cove.*—The mackerel fishery here has been a total failure, notwithstanding the fine weather and the earnest endeavours of the fishermen.

*Ingonish.*—Mackerel appeared about 1st June, but continued very scarce throughout the whole season.

*St. Ann's.*—First appearance in last week of June. Very few taken during the season.

*North Sydney.*—Exceedingly few mackerel reported.

*Louisburg.*—Light catches reported daily throughout the month of June.

*L'Ardoise.*—Very few reported.

*St. Peter's.*—The first run of spring mackerel passed outside in deep water and few were taken. In July the daily catch was fair up to the 28th when the fish all left. They returned again somewhere about 3rd August, and small catches were reported throughout August and September.

*Arichat.*—Mackerel struck in on 29th May. Fair catches first and third weeks of June and first week of July; but with the exception of a few schools of small fish occasionally there were no further reports.

*West Arichat.*—No spring mackerel visited this district and the summer mackerel were scarce; only about 150 barrels having been taken.

#### NOVA SCOTIA.

*Canso.*—On 1st June good stops were reported in the traps at Dover Bay; also some thousands reported taken between Canso and Guysboro'. Throughout the month of July the traps at Dover Bay were usually quite successful. At Canso light catches were occasionally reported in August and September.

*Whitehead.*—From the 1st of June until the middle of July light catches of small mackerel were reported, but none afterwards.

No reports of mackerel worthy of mention were received from any stations between Whitehead and Lunenburg.

*Lunenburg.*—From 1st June up to the end of the first week in October mackerel were, as a rule, very plentiful, and the total catch for the season is consequently very large.

*Port Medway.*—The catch here has been irregular and only fair. The fish were reported very plentiful in the latter part of June, but they would not mesh.

*Liverpool.*—Mackerel taken for the first time 12th June, and good catches were reported throughout the remainder of the month, the chief catches being by drag seines, as follows:—80 barrels on the 16th, 50 barrels on the 20th and 100 barrels on the 22nd. Throughout July the catch was fair; but in August, although schools were reported in the first week, there were no reports of any taken.

*Lockeport.*—Mackerel did not appear in the bays and harbours in any quantity this season, and the catch in consequence is small.

*Sand Point.*—The catch of mackerel, as far as reported, is light.

*Port la Tour.*—Mackerel were reported schooling quite frequently, but the catches were usually light.

*Pubnico.*—First mackerel taken 1st June. The traps at Pubnico and John's Island have averaged about 900 barrels each; and in Lobster Bay the hookers' catch is estimated at about four barrels per boat.

*Yarmouth and Digby.*—At Yarmouth and Digby the season's catch of mackerel was light.

### SQUID.

#### ANTICOSTI.

*Heath Point.*—Reported very plentiful 20th August.

*English Bay.*—A few taken from 4th to 24th August.

*Fox Bay.*—A few taken from 4th to 15th August, and reported very good from 15th to 22nd August.

#### QUEBEC.

*Percé.*—Taken in small quantities from 30th July to 12th August. Fair fishing 12th to 17th August. Poor from 17th to 25th August. Fair from 25th to 30th August. Poor from 1st to 13th October and fair from 13th to 20th October.

*Grand River.*—A few taken from 5th to 11th August and good from 12th to 14th; scarce from 15th to 17th August, improving to fair until 21st September; scarce again from last date until end of month. Fair from 1st to 23rd October.

*Newport Point.*—Poor catches from 3rd to 14th August, fair from 15th to 17th, and poor from latter date up to 22nd September; improving until 29th, and good 10th October. From 10th to 14th October few were taken.

*Paspebiac.*—A few appeared on 31st July, after which no reports were received until 1st October, when they were reported fair.

#### NEW BRUNSWICK.

*Miscou.*—Very plentiful from 17th to 19th August.

*Campo Bello.*—Very plentiful from 31st July to 5th August, after which they remained scarce until 3rd October, when they were reported plentiful.

#### CAPE BRETON.

*Port Hood.*—Reported fair 3rd to 8th August.

*Margaree.*—Good 5th to 26th August, and reported fair on latter date.

*Cheticamp.*—A few taken from 4th to 25th August and on 15th October.

*Meat Cove.*—A few reported on 25th July.

*Ingonish.*—Rather scarce from 21st to 23rd July. Good 24th July. Poor and irregular from 25th July to 15th August. Poor 21st and 22nd September. Very good 23rd to 29th September. Fair from 29th September to 17th October.

*St. Ann's.*—A few taken from 22nd to 31st July, and on 28th August.

*Sydney.*—Good 23rd July.

*Louisburg.*—Very plentiful 25th to 28th August. Fair 28th August to 18th September.

*Arichat.*—A few taken 25th July to 10th August.

*Hawkesbury.*—A few taken 8th August.

#### NOVA SCOTIA.

*Canso.*—A few taken 3rd to 17th July. Plentiful on the 17th and poor from 18th to 27th, when they became plentiful until end of month, 200 brls. being taken in traps and jigging freely, a large fleet of bankers was baited at this time. 7th to 10th August fair fishing, improving up to 14th; fishing extending to Crow harbour, where a number of bankers were baited. Poor from 14th to 25th August.



*Crow Harbor*.—Reported plentiful 1st August.

*Salmon River*.—Fair 3rd August, good 4th, fair 15th and poor 20th.

*Lunenburg*.—Good appearance reported 20th and 21st July.

*Lockeport*.—A few taken from 7th July to 18th August.

*Shelburne*.—A few taken on 24th July.

I have the honour to be, Sir,

Your obedient servant,

W. M. HUTCHINS,

*Clerk in charge Fisheries Inspection Bureau.*

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## APPENDIX D.—1891.

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### SYNOPSIS OF JOURNAL OF DOMINION FISHERIES PROTECTION STEAMER "LA CANADIENNE."

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*13th May, Wednesday*.—Left Quebec at 10.30 a.m. Proceeded slowly down the river, filling ballast tanks with fresh water, at 2.30 p.m., above Crane Island, lubricator on high pressure cylinder gave out; being unable to repair it on board, put about and returned to Quebec, where anchored in stream at 7.30 p.m. Sent engineer ashore to get new lubricator and leave old one to be repaired as a stand by; engineer returned with Mr. Hunter, who fitted new lubricator by 10 p.m.; night smoky—held on here.

*14th, Thursday*.—Left Quebec at 3.30 a.m. Passed Bic at 7.30 p.m. Strong N. E. wind with swell; no chance of landing at Matane; stood on down.

*15th, Friday*.—At 5 a.m. called at Pointe des Monts and landed supplies at the light for the Marine Department; all well at light; poor fur and seal hunt; a few herring; no salmon nets will be set for three weeks yet; 5.30 a.m. left Point des Monts for West Point Anticosti; strong N.E. with cold. Anchored and landed at West Point at 4 p.m.; gave bounty cheques for English Bay and Strawberry Cove to Father Thibault. Winter had been mild on the island; Fox Bay people had been badly off during winter, owing to non-arrival of the trader who usually supplied them; he was not heard of since leaving Halifax last fall. At Strawberry Cove, also, the people, as is usually the case with them, had run short; some of them for a month past have been living on potatoes alone. Eight lobster canneries are to be opened on the island this season. One of them, that of McMillan and McQuinn, has a steamer to collect the lobsters from the fishermen along shore and carry them to the cannery at Fox Bay. Returned on board at 9 p.m.; blowing fresh from the eastward, with appearance of dirty weather; decided to hold on here; all well at the light.

*16th, Saturday*.—Left at 4 a.m. for South West Point; strong east wind at 10.30 a. m.; making no headway against wind and sea; decided, as weather is freshening, to stand over to south shore; ship too light, having only taken coal enough with us to take us to Gaspé, to make good weather. Shaped course for Ship Head; heavy sea, increasing all day to a gale; made Cape des Rosiers at 6 p.m., rounded Ship Head at 10 p.m., and anchored in Gaspé at midnight—blowing a gale.

*17th, Sunday*.—Gale continues, with rain and fog; first salmon taken in the nets on Friday.

*18th, Monday*.—At 6 a.m. hauled in to Eden's wharf and began coaling; gale moderating; rain and fog continue. Met Overseer Annett, he reports lobster fishing began early, and promises well.



19th, *Tuesday*.—Finished coaling at 5 p.m.; hauled into stream, and washed down; took Overseer Annett on board; received this p.m. instructions from Ottawa by wire to proceed with usual work. Had no reply from Collector Joncas, to whom I wired as to state of affairs at the Magdalen Islands.

20th, *Wednesday*.—Left Gaspé at 5 a.m.; at 6.30 a.m. anchored and landed at Cape Ozo Cove; at O. R. Logie's lobster cannery saw no small or berried lobsters. Cannery opened on 11th May; 800 traps out; have done much better than last year. On board again at 7.30 a.m.; left and stood over to Seal Cove, where anchored and landed at 8.30 a.m. J. W. Windsor's cannery opened on 8th May, 900 traps; began well, but many traps lost in Saturday's gale; fishermen for this cannery are in dispute with those from O. R. Logie's cannery at Bois Brulé; rowed down along shore to Bois Brulé, sending ship down to lay off and on and wait; got disputing fishermen together, and ordered them to fish east and west of a line across the bay, running from Leggo's Brook to St. George's Cove; all traps now set on the wrong side of this line to be removed. Overseer Annett had already been down here and gave them the same orders, but they had not obeyed him. A. R. Logie's cannery at Bois Brulé had opened on 13th May with 650 traps; 25 per cent of his traps were destroyed on Saturday during the gale; instructed the foremen of these factories to see that their fishermen obeyed the instructions given, as all traps found on the wrong side of the line would be confiscated. Returned on board at noon; continued to Malbaie, where anchored and landed at 12.45 p.m.; E. W. Hoegg's cannery opened 8th May, 450 traps, lost many traps; on Sunday last; traps not fished since Friday last; before that had been doing well. Returned on board at 1.30 p.m., and continued to the Corner of the beach, where anchored, and landed at 2.30 p.m.; landed at Maybe Bros' <sup>H</sup>cannery, 500 traps; began fishing 4th May; fair run of lobsters; have done better than for years. On board at 3.45 p.m., and stood over to Percé, where anchored and landed at 4.45 p.m., called at Le Bas' cannery; opened 1st May; 1,300 traps; have done well, with same outfit last year; in whole season put up 213 cases; this year to date have put up 245 cases. At all the canneries visited to-day with Mr. Annett have found no illegal lobsters; no cod yet, and no salmon outside of Gaspé Bay. Put Mr. Annett on board steamer "Admiral" at 6 p.m., to return to Gaspé; instructed him to keep on the move constantly until close of lobster and salmon fishing; we put up to-day in all canneries the printed notices of the law, and all managers have promised, in return for the extra half inch in length of lobster granted them this season, to see that the law is fully and carefully carried out. Received this p.m. telegram from Deputy Minister, 20th May, *re* United States vessels at Magdalen Islands; wired Captain Gordon for instructions; returned on board at 7.30 p.m. no answer received when office closed; held on here for the night.

21st, *Thursday*.—Landed at 10 a.m. visited cannery; boats doing well. Received instructions from Captain Gordon at 10.45 a.m.; wired department that I would proceed direct to Magdalen Islands; returned on board and left at once for the islands; wind S.S.W.; 3.30 p.m. came on thick.

22nd, *Friday*.—Made the Deadman rock at daylight; rounded Entry Island at 7 a.m. and stood into Pleasant Bay; under Entry Island came too and boarded U.S. fishing schooner "Arequipa," Gloucester, in for bait; continued to Amherst, where anchored; and landed at 8 a.m.; some 30 fishing schooners off here looking for herring. Called at Custom house; all quiet; most of the fleet have left; a number of United States fishermen are reported to have bought bait and ice, without having taken out licenses. Most of the United States bankers take their own bait, which they have a right to do here as this, however, often means delay, they both take bait in their own nets and buy it from the natives. A number of vessels are here from Eastport, Maine, buying herring for smoking; these vessels are traders and not fishermen, the Eastport and Bay of Fundy herring fishery having failed. These vessels have no United States fishing licenses; they call themselves registered vessels, by which they mean that they are merchantmen, and not fishermen. The spring herring fishery here has been poor. The herring struck in early, and did not remain long in the bay. Most of the vessels bound here for the fishery got jammed in the ice off

the east point of Prince Edward Island, and were late in getting here; a number have gone on to Fox Bay, Anticosti, and others to St. George's Bay, Newfoundland. Boarded all the vessels in the Bay.

Names of Vessels.	Port of Registry.	Tons.	No. of Crew.	Where Boarded.	Remarks.
Arequipa.....	Gloucester, U. S.	68	12	Pleasant Bay....	Banker in for bait.
F. D. Hodgkins.....	Lamoine, Maine do	170	11	do .....	Trader buying herring to smoke.
Golden Ball .....	Gloucester do	272	9	do .....	Fishing—one seine.
Etta.....	Eastport do	63	6	do .....	Trader buying herring.
West Side .....	Gloucester do	147	6	do .....	do
Andrew Burnham .....	Boston, do	86	7	do .....	do
Rattler.....	Eastport do	78	6	do .....	do
Teresa D. Baker.....	Provincetown do	87	14	do .....	Fisherman—banker.
John M. Ball.....	do do	82	14	do .....	do
Longwood.....	do do	62	13	do .....	do
S. E. Nightingale.....	Eastport do	65	5	do .....	Trader buying herring.
Venilla.....	do do	62	6	do .....	do
Huntress.....	Lubec do	75	5	do .....	do
Clara Jane.....	do do	118	6	do .....	do
G. P. Whitman.....	Gloucester do	89	14	do .....	Banker in for bait.
Annie Wesley.....	do do	88	16	do .....	do
Margarett.....	Beverly do	131	18	do .....	do

In the afternoon called at R. J. Leslie's cannery; only now putting out traps; as long as herring seines are being drawn it is not possible to put out the traps, nor possible to get hands to do so, as all are engaged at the herring fishery. The lobster fishery all round the islands has begun late, partly owing to the ice and partly to the difficulty in getting men. This spring herring which a few years ago only brought from 5 to 8 cents a barrel in bulk from the seine now bring 45 cents, while small quantities have been sold to the bankers at as high as \$1.65 per brl. On board again at 5 p.m. At 6 a.m. wind chopped to N.E. with rain and fog. At 6.15 got in anchor and stood over to find shelter under All Right Island, where anchored at 7.30 p.m. All the fleet followed suit.

*23rd, Saturday.*—Had a dirty night; strong N.N.E. Boarded this a.m. the United States bankers "George P. Whitman," "Annie Wesley" and "Margarett"; they report fish scarce on the banks; they all have baited before this in Newfoundland, where they get a free license, but are obliged to give bonds not to sell their bait to the French; they are only allowed enough for a baiting at one time. They had to give a bond of \$3,000 each; this bond is given for them by a Newfoundland merchant; in return for this they have to buy their bait from the merchant who gives the bond. This has placed the supplying of the bait entirely in the hands of the merchants, and taken it quite away from the actual fisherman, who formerly used to supply the bait directly to the vessel and be paid in cash for it. The fishermen are naturally annoyed at this, as it takes away from them their only cash revenue.

*24th, Sunday.*—Blowing fresh all day; moderating towards evening; the fleet got under weigh and stood over for St. George's Bay, Nfld., the herring run being over here.

*25th, Monday.*—Left at 4.30 a.m. for Grand Entry, where anchored and landed at 6.45 a.m. A United States banker was off here trying to buy bait as we steamed in, but he got under weigh and sailed right away from us; we could not get his name. He got no bait, as it is scarce here, not enough having been taken to supply the local fishermen for the lobster and mackerel fishery. Called at the canneries; Portland Packing Company, 4,000 traps; Neil McPhail, 2,800 traps; Alfred Rankin, 1,600 traps; Claude Duclos, 700 traps, and Wm. McPhail, 750 traps. They only began fishing on Thursday last, and on Saturday quite a lot of traps were destroyed in the gale. very few traps are out yet. Lobsters appear plenty. People all approve of the change to 9 inches, and say that with this size limit the fishermen will be less



likely to violate the law. Several United States bankers have called here for bait and offered as high as \$1.60 per bbl.; they did not get any, as the people have not enough for themselves. At 9 a.m. left for South Beach, where anchored, and landed at Ballantyne factory; 2,000 traps; lobsters very plenty. Continued to Arseneau's cannery at Point Bossé; 1,000 traps; only began fishing this a.m.; appearances good. Rejoined ship and continued to House Harbour, where anchored and landed at noon. Vessels from here did poorly at seal fishery; only 6,000 in all taken, and of these 4,000 were taken from the shore. Visited here Binet and Chiasson's cannery, 2,000 traps, and Nelson Arseneau's, 2,500 traps; continued to Cap aux Meules. Herring bait for traps is scarce here and at House Harbour. Rejoined ship at 2.45 p.m. and left for Amherst, where anchored and landed at 4 p.m. Called at Custom house; no vessels here. Nothing new. The vessels that left here on Saturday have not returned, but have kept on to Anticosti or St. George's Bay, Nfld. Wired to Ottawa and Capt. Gordon; saw here Overseer Chevrier; gave him full instructions for the season; returned on board at 6 p.m.

26th, Tuesday.—Left at 5.30 a.m. for Fox Bay, Anticosti, intending to call at Etang du Nord, but a 8.30 a.m. came on thick off the West Cape, decided to continue direct to Anticosti, and not attempt to make Etang du Nord in the fog; thick all day; at 8.15 p.m. made fog gun at Heath Point.

27th, Wednesday.—At 12.10 a.m. laid the ship to, to wait for daylight to make Fox Bay; at 3 a.m. stood in for the bay, but at 4 a.m. came on to blow hard from north north-west; sea making; no chance to anchor and land at Fox Bay; ran back and at 5.30 a.m. anchored under the land in Wreck Cove; blew hard all day; landed at Heath Point Light; all well; weather moderated towards evening.

28th, Thursday.—Left anchorage at 5.30 a.m. and proceeded for Fox Bay; anchored off the reef and landed at 8.15 a.m.; rowed in among the vessels, and warned the United States vessels not to do any fishing here, as they had no right to fish within the limits of Anticosti, as they had at the Magdalen Islands. Rowed over to the lobster factory and enquired if any of the vessels had been fishing; was informed that they had, but no one could say which. Lobster fishing is fairly under way. The steamer collects the lobsters from Cormorant Point and East Bay, and brings them daily to the cannery here. Notified them not to expect any extension of the fishing season. Rowed in to head of the bay and called at telegraph office; was informed here that some of the United States vessels had been fishing, but no one would tell me which. Proceeded to board the vessels; boarded Canadian vessels first. Had information that the "F. D. Hodgkins" had a seine and had been fishing; boarded the following United States vessels:—

Name.	Port of Registry.	Tons.	Men.	Remarks.
Sea Foam .....	Eastport, U.S. ....	75	5	Trader, buying herring to smoke.
Sea Spray .....	do .....	76	5	do do do do
Rattler .....	do .....	78	6	do do do do
F. D. Hodgkins.....	Lamoine, U.S. ....	170	13	Fisherman, fishing and buying herring.

Found that this last vessel, the "F. D. Hodgkins," George A. Thompson, master, though cleared as a trader or merchant ship, and without a United States fishing license, had a seine boat alongside, with her seine in the boat prepared to fish; examined her papers; questioned the Captain; and found that he had been fishing; called the seine master, and found him to be one Alcide Cormier, of the Magdalen Islands; he admitted having fished for herring in the seine boat of the "F. D. Hodgkins" in the waters of the harbour of Fox Bay, Anticosti. Called the master's attention to the fact that he was supposed to be a trader, under register and without a fishing license; that after clearing from his home port as a merchant vessel he had engaged men in the Gut of Canso, and at the Magdalens, together with their



boats. That if he were simply a merchantman with the right to trade, he has no need to have as strong a crew as he now has, nearly twice as strong as he left home with; that as a merchantman he has no business to have a full fishing outfit of seine, seine-boat, &c., fishing boats, 3 dories, 5 on board and alongside in the water prepared to fish. On the other hand, if he is a fisherman he should have the United States fishing license that most United States fishermen have, but he would have no right without a Canadian license to buy fish, as he did at the Magdalen Islands, and as he had tried to do here, nor to engage men, nor to be found within the prohibited limits in a harbour, prepared to fish as he now is, and admitting that he had fished within the three-mile limit. That he is either trading or fishing under false pretenses. That on all these counts, but particularly for being now found, by me, within the harbour of Fox Bay, Anticosti, prepared to fish, and for having fished on Tuesday, the 26th day of May, instant, and again on the 27th day of May, instant, within the harbour of Fox Bay, Anticosti, I seize his vessel, which I then did, taking from him his ships' papers. I then ordered eight of his crew on board "La Canadienne," sending eight of my crew, armed, on board the "F. D. Hodgkins," in charge of my first officer, Mr. Bélanger, with orders to get in the boats and seine, take the vessel out of harbour and proceed direct to Gaspé. Gave them a pilot to take them out of the harbour; proceeded to the telegraph office and reported to Ottawa and to Captain Gordon at Halifax. I took Captain Thompson to the office with me, that he might wire his owners and the United States consul. Returned on board "La Canadienne" and got under weigh for Gaspé at 5.30 p.m. At 6.30 p.m. off Sand Capes; wind having calmed off, steamed alongside the schooner and gave her a line, took her in tow and proceeded.

*29th, Friday.*—Anchored in Gaspé at 1.30 p.m.; took Captain Thompson with me, and introduced him to his consul, which gentleman I notified of the circumstances, asking him to take charge of the schooner's crew, which he at once did. Reported our arrival, and deposited the schooner's papers in the Custom house. The "F. D. Hodgkins" had on board 700 barrels of herrings in bulk, all of which she had taken or bought at the Magdalen Islands.

*30th, Saturday.*—Unbent the schooner's three main sails and placed them in safe-keeping; detached her steering gear, taking part of it away. Put our coxswain and carpenter on board the vessel as guardians. At 12.30 p.m. despatched "La Canadienne" to Pictou to fill up with coal, and return here at once. Received myself orders to proceed to Quebec with the "Hodgkin's" papers, and place the case in the hands of Messrs. Casgrain, Angers and Laverie, agents of Department of Justice.

*31st, Sunday.*—Left Gaspé in steamer "Admiral" for Quebec.

*1st June, Monday.*—Arrived at Dalhousie.

*2nd, Tuesday.*—Arrived in Quebec, and called on Messrs. Casgrain, Angers and Laverie; remained in Quebec until Friday, the 5th June, when left Quebec to return to Gaspé.

*6th, Saturday.*—Rejoined "La Canadienne" at Gaspé. She had returned to Gaspé on 3rd, Wednesday.

*7th, Sunday.*—Met Overseer Annett; he reports lobster good, salmon a failure; cod fishing well begun. Left Gaspé for Baie des Chaleurs at 10 p.m.

*8th, Monday.*—Anchored in Paspebiac at 7.30 a.m.; cod fishing begun; herring fairly abundant; reports from rest of coast, say cod fishing good all over. On board again at 11 a.m., and left for Carleton, where anchored at 4.45 p.m. Then left "La Canadienne" to return to Quebec, giving Captain Bélanger instructions to visit all the lobster canneries between here and Newport.

*9th, Tuesday.*—Captain Bélanger landed and visited the cannery of Bernard Leclaire; opened 23rd May, 225 traps; fifteen cases to date; lobsters large, but scarce; salmon fishing poor. Steamed round to Maria; anchored and landed; visited here cannery of J. W. Windsor; opened 5th May; 1,000 traps; seventy cases packed to date; no small lobsters, but lobsters scarce; salmon fishing poor. Continued to Capelin, where anchored; landed and visited cannery of J. W. Windsor;

opened 5th May, 809 traps; to date 228 cases packed; lobster fishery good. This cannery had already been visited by Mr. Smith, the local overseer. On board, and continued to Capelin East, where landed and inspected cannery of Joseph Cyr; opened 1st May, 600 traps; packed to date 284 cases; fishing good. Overseer Smith had already visited this cannery. Continued to New Carlisle, where landed, and inspected cannery of Wm. Fauvel & Co.; opened 1st May, fishing 1,000 traps; canned to date 230 cases; fishing good. Overseer Smith has already been here four times.

10th, *Wednesday*.—Steamed down to Nouvelle; landed at cannery of D. W. Hoegg & Co.; opened 7th May; 3,000 traps; canned to date 400 cases. The run of lobsters here is smaller than anywhere else on the coast. Overseer Phalen has visited this cannery. Capelin stuck here and at Pasbebiac; this morning continued along coast to Shigawake, where landed, and called at boiling-house belonging to D. W. Hoegg & Co. The lobsters taken are boiled here and taken up to Nouvelle to be canned. The run of lobsters here is small. Continued to Port Daniel West, where landed, and called at cannery of Alexander Bros.; opened 26th May, 400 traps; canned to date 90 cases. Lobsters good size. Overseer Phalen has been here. Continued down to Port Daniel Bay, where called at cannery of D. W. Hoegg & Co.; opened 8th May, 600 traps; canned to date 350 cases. Lobster fishing good; fair cod fishing; salmon fishing poor. Mr. Phalen has been here four times. Continued to L'Anse à la Barbe, where landed, and called at cannery of D. W. Hoegg & Co., opened 5th May; 600 traps; canned to date 284 cases; closing down to-day. Steamed on down to Mahy Islets, Newport, where landed at cannery of Wm. Allis; opened 27th April, 900 traps; canned to date 300 cases. Overseer Jones has been here four times. Lobsters plenty and of fair size. Cod fishing good. Continued down to cannery of J. W. Jessop, Newport; opened 1st April, 600 traps; canned to date 175 cases. Overseer Jones has paid five visits here. Lobsters of a good size. Cod fishing good. Steamed up the coast to Bonaventure, where called at cannery of D. W. Hoegg & Co.; opened 10th May, 750 traps; canned 300 cases to date. Lobsters plenty and of good size. Overseer Smith had already paid several visits here.

11th, *Thursday*.—I rejoined "La Canadienne" at Dalhousie at 7 a.m. Met here Overseer Verge. He reports salmon net-fishing poor. The nets have all been shortened up without any trouble. Fly fishing is poor; there has been no flood in the river yet, and until there is heavy rain the fish will not run in, as the water is now too low and clear. The net fishermen on the Quebec side complain about having to pay fees on both bar net and winger, while on the New Brunswick side most of the stations only pay on the bar net.

12th, *Friday*.—At 5 a.m. left for Nouvelle, where anchored, and landed at 6 a.m. Met Overseer Cyr; instructed him to collect his salmon fees at once and remit to the department. The Indians do not now spear in the Nouvelle River, but they troll for trout in the estuary; this they have a right to do. The farmers at Carleton complain that by preventing them from seining near the gully at Carleton we are preventing them from taking coarse fish for manure. Mr. Cyr has instructed the guardians of Messrs. Way & Maitland to watch the seines, and if they find trout in them to set them free; this is only fair to the people. Instructed Mr. Cyr to visit the lobster factories. Returned on board at 8 a.m. and continued to Carleton, where anchored, and landed at 9 a.m. Called at Leclaire's cannery. This is a small concern, run by two men; they fish one day and can the next. Their lobsters are large, but not plenty. Met here Auguste Bernier, Mr. Maitland's guardian, and Narcisse LeBlanc, fisherman; took them out to the gully, and, after hearing what they had to say on both sides, fixed limits on either side of the mouth of the gully within which no seining would be allowed. Herring were not as abundant as usual this spring. Capelin also were scarce. The trout run into this gully to feed on the capelin and herring spawn; they run in between the 24th May and 24th June. Returned on board at 11 a.m. and left for Maria, where anchored, and left at 12.15 p.m. Salmon net-fishing poor here and at Carleton. Called at Windsor's cannery.



Lobsters not abundant, but the few taken are of large run. Returned aboard at 2.15 p.m., and left for New Richmond, where anchored, and landed at 3.15 p.m. Visited steam saw-mill belonging to Mr. H. Montgomery. The slabs are built into wharves or cribs, and the sawdust either run into them or carted into a pile on shore. Lady Stanley and party arrived this morning for the fly fishing on the Big Cascapedia. A number of American gentlemen are also on the river fishing.

*13th, Saturday.*—Left at 5 a.m.; at 8.30 a.m. landed at Carlisle West, and saw Overseer Smith; he reports salmon fishing a failure. Lobster and cod fishing good. Rowed down along shore to Fauvel's cannery; they have had to give up taking lobsters at Nouvelle, as the run was too small; they had been advised by the overseer to do this, as the lobsters were getting dangerously small. The lobsters taken off Carlisle are all of a good run, but off Nouvelle, only eight miles below, they have always been small. Capelin have been more abundant than usual, and cod have been taken in quantities well up into the head of the bay. Rejoined ship off Carlisle at 11.45 a.m.; ran down to Paspebiac, where anchored; and landed at 12.15 p.m. Cod fishing returns just in from Sheldrake to Natashquan on the north shore report fishing commenced with good prospects. Anticosti fishing poor. A splendid week's fishing on this coast from Paspebiac to Point St. Peter.

*14th June, Sunday.*—At anchor in Paspebiac roadstead; crew attended church on shore.

*15th, Monday.*—Left at 5.45 a.m. for Port Daniel; called at canneries of Hoegg and Windsor at Shigawake and Port Daniel. They have both done much better than usual, but it is difficult to keep the fishermen at the lobster fishing, as the cod fishermen are all doing well, and hauling lobster traps is heavier and more monotonous work. Called on Overseer Phalen; he reports the lobster fishing as the best, both with regard to quantity and size, of the last ten years. Salmon fishing so far is everywhere poor. Saw millers are more careful about letting sawdust and slabs go adrift. Boarded here the schooner "Louise," of Yarmouth, banker, in for bait; reports fish plenty on the inside banks. Left at 1 p.m. for Pabos; off L'Anse aux Gascons at 1.45 p.m.; sighted a schooner making across from Miscou for Port Daniel; stood over to her and found her to be the new cutter "Agnes Macdonald" looking for water and ballast. Advised Capt. Kent to run to Grande Grève for ballast. Continued for Pabos, where anchored; and landed at 4.30 p.m. Called at Messrs. King Bros'. saw-mill; slabs and sawdust are not allowed adrift. Salmon fishing poor; cod abundant. On board at 6 p.m.; steamed down to Little River, west, where landed at Overseer Jones'; he is away visiting the canneries at Newport; left instructions here for him. Rowed down to Grand River; none of the salmon nets are out here, Mr. Cabot, the owner of the fly fishing rights, having leased the salmon nets, so that all the fish may run in the river. Cod fishing here is twice as good as at the same date last year. Herring, for bait, still plenty. On board at 9.45 p.m.; held on here all night.

*16th, Tuesday.*—Left at 6 a.m.; fog and rain; stood down by the lead to Cape Despair, where anchored in 6 fathoms and landed at Windsor's cannery. Lobsters getting scarce; fishing has been good; will close down in a few days, as fishermen are all going into the cod fishing; now that the lobsters are getting scarce the cod fishing pays better. On board at 9 p.m.; stood down to Percé; off Percé at 10 a.m. Strong south-east with rain and fog. Boarded here schooner "Bona Fides," of Lunenburg, banker, in for bait; has 200 cwt.; prospect good on inner banks. Wind freshening; stood into Gaspé, where anchored at 2 p.m. Overseer Annett reports lobster fishing been good; most of the canners intend closing down next week; he reports the size limit to have been well observed. Cod fishing good. Boarded "F. D. Hodgkins"; herring are beginning to smell bad; ordered them to keep hatches open at night to let in cool air.

*17th, Wednesday.*—Removed our own officers from the vessel and put Wm. Fingleton in charge; set crew to re-salt the herring and pour pickle round the wings; the bulk of the herring are keeping well enough; only a few that have escaped the salt are turning bad.



18th, *Thursday*.—Left Gaspé at 5 a.m. for Grand Grève where anchored at 7.15 a.m. Cutter "Agnes Macdonald" came in and made fast to us, and began taking in shingle for ballast; salmon fishing poor; cod fishing has been good; but bait is getting scarce. "Agnes Macdonald" cast off at noon and stood into Gaspé; we got up anchor and left for Magdalen Islands; strong south wind.

19th, *Friday*.—Had strong southerly breeze crossing; anchored in Pleasant Bay off Amherst at 7.15 a.m. "La Grippe" has been very bad at the islands; most of the canneries have either been closed down, or only working with a few hands, for the past three weeks. The man Cormier who had been shipped as seine master on the schooner "F. D. Hodgkins" has died of the gripe; no cod fishing has been done yet, and not a schooner left for the fishing grounds, as whole crews are yet down with the sickness. Mackerel struck in for about a week; just now only a few small ones about. Visited Leslie's cannery; only about half his traps have been put out, and the greater part of his crew are still unfit for work. Lobsters seem to be very abundant; large quantities of lobster meat ready for the cans have had to be thrown away, as it was impossible to find hands to can it. The people are poorly off, as many of them have not been able to get their crops in. The canneries at House Harbour, Grand Entry, South Beach and Etang du Nord are all either closed down or just about resuming work, after having been closed for two or three weeks. Called at the telegraph office and reported condition of affairs to Ottawa: returned on board at 1.15 p.m. and left for Grand Entry, where anchored; and landed at 3.10 p.m. Same state of affairs here as at other stations. Visited a number of the sick and prescribed for them; there has been 15 deaths here. Met here Overseer Chevrier; he informs me that in all there has been about 75 deaths within the last three weeks. Returned on board at 6 p.m. and left for Anticosti; passing between Bryon Islands and the Bird Rocks.

20th, *Saturday*.—Made Heath Point Light at 4 a.m.; anchored off Fox Bay and landed at 7.30 a.m. Visited McMillan and McQuin's cannery; they are doing fairly well now, having put up about 800 cases. Though they opened in May, yet they report that the fishing only fairly began on the 10th June. They lost 75 per cent of their traps at Cormorant Point in a southerly gale last week. They are fishing in all about 3,000 traps, and have not done as well in proportion as last year. Cod fishing has begun. The three United States schooners we left here on the 28th May left the next day; they got no herring. No others have been here since. Wrecking schooner "Florence," Captain Brown, of Quebec, is here working at the wreck of the SS. Brooklyn. Three Nova Scotian bankers are now here looking for bait. No herring here now, but plenty capelin. Returned on board at 9.30 a.m. and left along the north side of the island for Salmon Bay; at 11 a.m. thick fog; lost the land; at noon closed up enough to see the land; stood in for shore; found we were a little below Salmon Bay; stood up, and at 1 p.m. anchored and landed at Innis, and Hemions' cannery; they are not doing well; they landed here on the 10th May; only began to get traps out on the 24th, but did nothing worth while until the 10th June. They have out about 2,000 traps fished by 20 boats, and have packed about 375 cases. The lobsters here run about  $3\frac{1}{2}$  to the lb. can. Allison doing badly with salmon; says fishing lobster pots in the bay shies the salmon off. Here, as well as at Fox Bay; all hands have had the gripe, and are only now getting well. Continued at 3 p.m. to Mauzerole, where anchored, and landed at 5 p.m. Called at Dawson's cannery; this man came here this spring from Margaree, in Cape Breton; he has 500 traps out, fished by 4 boats, and so far has only packed 35 cases. This is evidently poor ground for lobster fishing, as the water deepens too suddenly. Cod fishing boats here from Douglstown are doing badly. Dawson intends to pull down his building and go back home as soon as his schooner comes for him. On board at 6 p.m. and left for Cow Point, where anchored; and landed at 7.20 p.m. Called at Hubert and Theriault's cannery; these people came here from Esquimaux Point; have 1,300 traps out, 7 boats; 40 hands employed in all; they began fishing 1st June; did nothing until the 12th, and now have only 80 cases canned; the water here goes right down from the shore and is not shoal enough for lobster fishing. There are cod fishing on the north side

of the island at Cow Cove, 2 boats; Potatoe River, 2 boats; Capelin Bay, 2 boats; Macdonald's Cove, 11 boats. These boats are all from Douglastown, on the south shore. Returned on board at 8.20 p.m.; held on here all night.

21st, *Sunday*.—Left at 3 a. m. for Esquimaux Point, where anchored at 7.45 a.m.; vessels all here yet; the crews are all down with "la grippe," which has been bad here; 13 deaths in the village; by this delay the vessels have very likely missed the cod at Natashquan, which is usually their first stopping place below here. The fish are known to have been abundant there for the past two weeks. The seal fishery has been a failure; the vessels did not get out as early as they should have, and when they got out they took the wrong direction and missed the seals. The schooner "Marie Arsenie," wrecked on St. Charles' Island last fall with a full cargo of contraband from St. Pierre Miquelon, became a total wreck; the cargo was all landed and stored on the island. Her owner, who passed the winter here, bought the schooner "Busy." With this last craft he has, in two voyages, removed all his contraband, and is reported to have successfully run it in. Crew attended mass here at 11.45 a.m.; wind veered to the east, with fog and rain; left at once for Mingan, where anchored at 1.45 p.m. Mr. Dennistown and party landed here to-day from the steamship "Otter" to fish the Mingan River. The steam yacht "Nooya," of New York, is in here; she landed her party, Messrs. Scuyler, Cadwallader and De Forrest, at the St. John River, and has come down here to harbour while these gentlemen are fishing. Both the Mingan, Romaine and St. John Rivers are rather high for good fishing. The Indians are mostly out of the woods; they have made a poor hunt; the grip has not touched them yet. Père Arnaud, the Indian missionary, says that at Betsiamits they had it before he left, but that they had it lightly. Saw Overseer Duguay; he has been ill ever since his arrival on the coast, and will not likely be fit for duty this season. Hills still covered with snow; weather cold and raw; strong east wind.

22nd, *Monday*.—Left Mingan at 7 a.m.; at 8 a.m. landed at Long Point; people here still down with the sickness; three deaths; cod fishing poor; on board at 9.30 a.m., and left for Magpie, where anchored and landed at 11.30 a.m. Cod fishing poor; people only recovering from "la grippe"; three deaths here; salmon fishing in Magpie River poor; attended a number of sick here, and left for Sheldrake, where anchored and landed at 3.15 p.m. Plenty of cod, but it will not bite, being full of capelin; many sick here, among the others three families of Indians. Returned on board at 4.45 p.m. and left for West Point, Anticosti, where anchored, and landed at 8.30 p.m.; fishing poor. Cannery opened in Ellis' Bay by Dogget & Co., of Liverpool, N.S.; 900 traps; 19 hands in all; canned to date 500 cases; lobsters abundant about Ellis' Bay; they began on 4th June; no herring; salmon net-fishing poor. Returned on board at 10.30 p.m.; strong south-east wind with heavy sea; held on here this a.m. at Long Point. Appointed, as instructed by Captain Gordon, John Vibert, fisherman and telegraph operator, agent for that section of coast for the Fishery Intelligence Bureau, to send daily reports to Halifax; gave him code and instructions as to his duties.

23rd, *Tuesday*.—Left at 3 a.m. for South West Point, where anchored, and landed at 10 a.m.; wind south-east, with heavy sea. Appointed Miss Pope as agent for the island of Fishery Intelligence Bureau; gave her code, etc., as ordered by Captain Gordon. At West Point light last evening I found all hands down with "la grippe." Keeper Malouin being very ill; reported here this morning that all are somewhat better; left South West Point at noon; no chance to land with this wind at Goose Point, where is another lobster cannery belonging to Messrs. Innis and Hemion, which is the only one not visited. Stood over for south shore, and at 7 p.m. anchored under the land at Little Gaspé; blowing fresh from east with rain and fog.

24th, *Wednesday*.—At 8 a.m. ran up to Three Runs, with the view of filling tanks with fresh water, but no chance to do so, as there was too much sea on. At 12.30 p.m. got in anchor and ran into Gaspé; received orders to release "F. D. Hodgkins" on being notified by Messrs. Casgrain, Angers and Laverie that the fine had been paid.



25th, *Thursday*.—Strong east wind with fog; went out again to-day to take in fresh water, but had to give it up; still a heavy sea on.

26th, *Friday*.—Same weather continues; managed to fill tanks to-day; had notice from Messrs. Casgrain & Co. that fine was paid; had also permission from Ottawa for "Hodgkins" to ship a crew here, as her original crew had been sent home.

27th, *Saturday*.—Set hands to rebend sails on "Hodgkins," and refit steering gear at 4 p.m.; handed her over to her captain before the United States consul; strong south-east gale.

28th, *Sunday*.—Gale continues with rain and fog; at anchor in Gaspé.

29th, *Monday*.—Same weather; gale moderating; left Gaspé at 5 a.m., but fog closing down again, had to come to anchor inside of Sandy Beach at 6.30 a.m.; 5 p.m. weather cleared; stood out of the bay; still heavy sea from north-east; no chance to land on the river shore; anchored under land at Indian Cove at 7 p.m. Boats report nothing whatever done for past week, owing to constant rough weather; same report all over south coast.

30th, *Tuesday*.—5 a.m. got in anchor and stood round Cape des Rosiers; sea too heavy to land along this shore; stood up the river at 9 a.m.; off Fame Point came on thick; hauled off shore and continued up; clearing at 1 p.m. stood in under Cape Magdalen; anchored and landed at Cap à l'Ours; fishing here for salmon and cod both poor. Gentlemen fly-fishing in the Magdalen River have done nothing—given it up and gone home; the river has been too low; after last week's rain the fishing will improve, as now the salmon will run in; on board at 2 p.m., and left for Mont Louis where anchored at 4.30 p.m.; landed and saw Overseer Lemieux; fishing poor all along this shore. On board at 7 p.m.; held on here all night.

July 1st, *Wednesday*.—Left at 4.30 a.m. for Ste. Anne's where anchored and landed at 8 a.m. called at Overseer Letourneau's, he reports that Mr. LeBoutillier had put out a salmon net in the river without a license; the net was at once taken out. The owners of two small saw-mills had been fined \$20 each for allowing saw-dust to escape. Salmon fly-fishing so far a failure, there are on the river now Col. Edgerton, General Taylor, and Messrs. Bonner, Gooderham and Hogan. There are only two salmon nets fished in this division and neither of them have done anything. Visited several of the saw-mills, and urged the owners to be careful of their slabs, and saw-dust. Returned on board at 1.10 p.m. and left for Godbout. When off Point des Monts, keeper signalled boat pilot (want immediate assistance), bore up for the light and landed, found all hands down with la grippe, and the ex-keeper Mr. L. F. Faffard in *extremis*; did what we could for them, returned on board and continued for Godbout, taking up with us Overseer Comeau, who had come down from Godbout to help them at the light; anchored in Godbout Bay at 8.30 p.m. Salmon fishing good both in nets and in the river, where are now fishing Messrs. Law, Robertson and Manuel. Enquired here as to complaints made by Bilodeau of Trinity. Mr. Comeau visited the division as often as he could. If Bilodeau knew of anything wrong he should have warned Comeau at once, they are both keepers of telegraph offices and could easily communicate.

2nd, *Thursday*.—Left Godbout at noon, at 2 p.m. landed at Point des Monts light. Mr. L. F. Faffard died this a.m.; others are better. Continued at 3.30 p.m. for Trinity Bay where anchored at 4.30 p.m. Salmon fishing good; cod fishing just beginning; called at Trinity River and saw Mr. Bilodeau, the river guardian, he did not himself know of anyone that had not tied up his salmon nets on Sundays, but says, it was reported that some fishermen had not done so. Instructed him that as fishery guardian, officer of customs and a justice of the peace, it was his right and duty to look after these things himself, and to make seizures whenever he saw the law violated; and that in future whenever he found nets illegally set he should seize them and report to Overseer Comeau or myself. Met at Trinity River Messrs. McNaughton, Gibb and Fitch, who are fly-fishing, they are not doing much as the water is too low. On board at 9 p.m. Tugs "Conqueror," "Florence," "Dauntless" and "Lake" at anchor here waiting for tows.



*3rd, Friday*.—Strong eastwind. Left at 5 a.m. for eastward; no chance to land along the shore; stood right on for Seven Islands Bay where anchored at 2.30 p.m. Called at Telegraph office and instructed P. E. Vigneault, operator, to act as agent, for the coast from Sheldrake to Godbout, for the Fishery Intelligence Bureau; gave him the code and forms sent me by Captain Gordon. Many yet down here with la grippe (five deaths). Indians out, poor hunt, all badly off. Pere Arnaud here to begin the mission. Indians not yet taken the grippe. Cod fishing fair, no mackerel.

*4th, Saturday*.—Fog in early morning. At 6.30 a.m., cleared; got under weigh for Moisie where anchored and landed at 8.30 a.m. Saw Overseer Migneault who reports good salmon fishing, now nearly over; some of the nets are being taken in to-day. Indians here badly off and threatening to spear salmon. Got them together and warned them not to attempt to do so or they would be severely punished; advised them to petition the Indian Department showing how badly off they were and ask for help. They killed no deer during the winter and were short of food, and unable to hunt, many of them had to eat Beaver skins on the way out. The salmon net fishery in the estuary has been one of the best ever made. The owner of the estuary fishing, Mr. Holliday, is here seriously ill. Five people have died here of the grippe. Cod fishing is fair, but the currents just now are too strong. Returned on board at 11.30 a.m. Sea made again and had trouble to reach the ship. Left for Sheldrake. Strong S.E. off Sheldrake at 5 p.m., no shelter here with this weather, stood on down, passed inside Perroquet Light at 9 p.m. and anchored inside Bald Island in 15 fathoms at 10.20 p.m. Fog.

*5th, Sunday*.—Blowing half a gale with fog, no chance to land at Long Point at 8.30 a.m., ran into Mingan and anchored. Landed at Hudson Bay Post. Indians all down with la grippe, about 150 sick in all. Dr. Fiset, of Rimouski, has been sent down by the Local Government to attend the white population of the coast. He has been up from Esquimaux Point to visit these Indians. There have been five deaths among them. Dr. Fiset was called back to the Point yesterday. Captain Pitts, trader from Halifax, is up from Blanes Sablons, he reports the whole population down with the influenza. He also reports that the ice has backed in through the Straits with the constant east wind and is jammed on shore all the way up to Meccatina, putting a stop to all fishing. Overseer Duguay still ill, having had a relapse. Visited all the Indians with Mr. Scott, Chief of the Hudson Bay Post. Blowing half a gale all day with fog at intervals.

*6th, Monday*.—Still the same weather. Visited the Indians twice to-day with Mr. Scott, another death last night; others improving.

*7th, Tuesday*.—Fog all a.m. Indians and Duguay all better to-day. Left for Esquimaux Point at 11.30 p.m. where anchored and landed at 2.45 p.m. Vessels all left for the cod fishing below, except two, for which no crews could be had. Some of the people have returned here from Hubert and Theriault's lobster cannery at Cow Point, Anticosti, the cannery is being closed down as lobsters are scarce. Called on Monseigneur Bossé. The sick here are all getting better. Dr. Fiset has gone on down to Natashquan. Dr. Tremblay appointed as Stipendiary Magistrate here by the Local Government, has arrived; obtained from him a further supply of medicine for use below, as all that I had belonging to the ship has been given away. The codfishing vessels had been delayed three weeks by the sickness, and when they did leave most of the crews were not thoroughly recovered. On board at 6 p.m. and left for Puffin Bay, where anchored at 8 p.m. for the night.

*8th, Wednesday*.—Left at 2.45 a.m. for Anticosti, but finding it thick along the Anticosti shore with strong S.E. wind, bore up for Natashquan, distance run at 9 a.m., slowed down and went in slowly by the lead to make the land. 10 a.m. fog lifting a little; made English Point; found SS. "Otter" which had left the Point yesterday close by us in the fog. Anchored in Natashquan at 11 a.m. Dr. Fiset here, people getting better, one death. Codfishing good, fish struck at end of May and has been very abundant ever since. Some of the best boats have already over 150 cwt., the average being to-day 100½ cwt., boats that came in this afternoon after

six hours fishing had from 12 to 14 drafts. There is an enormous school of fish off this place, and had it not been for the sickness the catch would have been very much larger. Salmon fishing about same as last year. The fly-fishermen have done well. There are on the river General Wade Hampton of South Carolina, Senator McPherson of New Jersey and Messrs. Hawk, Chapman, Hodges and Pyke of New York. The seal fishery made by the four small vessels from here was good. Two United States bankers called here for bait, "Elsie M. Smith" and "Essex," both of Gloucester, they did not get any. The vessels from the Point passed here without calling. Overseer Gaudin reports all quiet and correct.

9th, Thursday.—Left Natashquan for the eastward at 3 a. m. ; strong N.E. at 10 a. m. ran into Romaine and anchored, met Overseer Mathurin ; he, as well as every one else here, has been laid up, all recovering gave medicine to some of the worst cases. The Indians who had been up for the mission have all gone back, they were warned by Père Arnaud to get back into the woods as quickly as possible. They were all well when they left here. Cod has been very abundant. The Esquimaux Point vessels had been here since the 2nd July ; they left for the eastward this a.m. They took an average of about 30 cwt. each. Two Nova Scotia vessels from Jeddore of about the same tonnage and the same number of crew had taken here during the same time 250 cwt. each. Salmon fishing only began this week. There are no lobster factories on the coast, this year. Those formerly in this division have been removed to Anticosti. On board at noon and left for the eastward, passed outside two large Nova Scotia bankers, who are fishing on the banks or shore, the "Beulah," of La Have, and the "Eureka" of Lunenburg, they are fishing on banks about 6 or 8 miles of shore. At 4 p.m. anchored in Yankee Harbour, St. Mary's; found here the following vessels, all of which were boarded.

Vessel's name.	Where from.	Tonnage.	No. of Crew.	How fishing.	Remarks.
Sea Gem .. .. .	Halifax .. .. .	30	10	Hand and line..	250 cwt.
Royal Charlie .. .	do .. .. .	31	11	do .. .. .	250 do
Amélia .. .. .	Esquimaux Point.	50	8	Float line .. .	30 do
Marie du Sacré-Cœur.	do .. .. .	46	8	do .. .. .	20 do
Acara .. .. .	do .. .. .	30	8	do .. .. .	50 do
Eugénie .. .. .	do .. .. .	48	10	do .. .. .	22 do
Ste-Marie .. .. .	do .. .. .	37	7	do .. .. .	25 do
Marie Anne .. .. .	do .. .. .	35	8	do .. .. .	20 do
Gleaner .. .. .	do .. .. .	41	8	do .. .. .	20 do
Elizabeth .. .. .	do .. .. .	27	5	do .. .. .	15 do
Phoenix .. .. .	do .. .. .	28	4	do .. .. .	40 do
Stella Maris .. .. .	do .. .. .	51	10	do .. .. .	30 do

The two first of these vessels are six weeks out from Halifax, they have never been on this coast before, usually fishing off the North Cape of Prince Edward Island, they want about 100 cwt. each to load. They have taken all their fish during last 10 days at Romaine. They were induced to come down to-day by the Esquimaux Point men who led them to expect better fishing to the eastward, but as they find fish scarce here they are going right back to Romaine where they hope to fill up in a few days more. There is on board the "Royal Charlie" Dr Morris, of Musquodoboit, Nova Scotia, who came over for a holiday and to get some fishing and shooting. He has attended all the sick between St. Mary's and Kegashka, and all are recovering. The Esquimaux Point vessels left home on the 27th June, this is their second stopping place ; they did not stop at Natashquan, where the fish is abundant. When asked the reason why, they say that the harbour is too far from the fishing ground (3 to 6 miles) for them to go in their boats, and that their vessels not being fitted with cables they cannot anchor on the ground. Held on here.



10th, Friday.—The Esquimaux Point vessels all left for the eastward at 5 a.m. The Halifax vessels stood back west. I advised them to go back to Natashquan if they found the fish gone at Romaine. We left for the eastward at 6 a.m. and anchored in Harrington at 9 a.m. All down here with the sickness—one death—others getting better; nothing done with the fish; first school passed down while the people were ill; not much fish since; gave them medicine; boarded here.

Vessels name.	Where from.	Tonnage.	No. of Crew.	How fishing.	Remarks.
Marcelia.....	St. George's Bay, N.F...	31	8	Hand and line..	Been here two weeks, done nothing, fish won't bite.
Louie.....	Burgeo.....	32	8	do ..	
Extenuate.....	Fortune Bay.....	24	5	do ..	
Bertha M.....	do ..	20	5	do ..	
Rowland ..	Burgeo.....	23	6	do ..	

These vessels are new to this coast, having been formerly engaged in supplying bait to bankers and taking it over to the French. They have lost their occupation, and have come here to fish. They say the supplying of bait has been taken out of the hands of the small fishermen, and is now altogether controlled by the big merchant who gives the bond. This tallies quite with all that the United States bankers, who had baited in Newfoundland, told me at the Magdalen Islands on the 23rd May last. Left at noon for Little Meccatina where anchored off Havre à la Croix at 1 p.m., boarded line.

Name.	Where from.	Tons.	Crew.	How fishing.	Remarks.
Notice.....	Burgeo, N.F.....	47	8	Hand and line....	With one exception these were all in the bait business. They complain bitterly of the action of the Newfoundland Parliament, and merchants.
Eagle.....	" ..	15	4	" ..	
Brothers.....	Placentia ..	21	6	Cod seine.....	
Challenge.....	" ..	18	6	" ..	
You and I.....	" ..	28	6	" ..	
Three Brothers.....	Bonne Bay ..	21	6	Hand and line....	
Parsee ..	Green's Pond ..	21	8	Cod seine.....	

These as well as most of the Newfoundland vessels that I boarded on this coast, fully expected to be driven off, in return for the action of their own Government towards our fishermen in refusing us bait, and making us pay duty on salt and barrels, carried on board purely fishing vessels, for use in curing fish, and not for trade. On board at 3 p.m. and stood round the Island, but found no vessels in the Eastern Harbor; continued on to Whale Head, where anchored off Sloop Harbour at 5 p.m.; found here the following vessels:—

Name.	Where from.	Tons.	Crew.	How fishing.	Remarks.
Garland.....	Petite Rivière, N.S..	51	11	Hand and Line and Trap.....	Here two days.
Magic.....	Lunenburg " ..	45	11	" ..	
Bismark.....	Green's Pond, Nfld..	53	10	Trap and Seine....	



The Esquimaux Point fleet which left Yankee Harbour this a.m., are all now in this harbour. I found that the schooner "Bismark" George Hand, master, from Green's Pond, was fishing a cod trap without license. Captain Hand had fished this way last year in Rocky Bay and escaped without paying any fee; in fact he had laughed at Overseer Whitely when told that he could not put out a trap without a license. The people also complain that with his seine he has disturbed the hand line boats. I seized his trap which he values with its gear at £60, and warned him that if I had any more trouble I would take his seine also. I had to give him some of the lines attached to his trap, as he had nothing left to tow his seine boat with. A good spurt of fish here to-day, 50 boats are fishing close off the point of the harbour, all doing well with the float line. Our own boats busy getting up the traps and moorings. Attended here to a number of sick.

11th, Saturday.—Left in boat at 6 a.m., to visit sick at Isle au Chat, where a number are down; sent ship round to Whale Head to meet me, where I rejoined her at 9 a.m., and left for Mutton Bay, where anchored outside at 10 a.m. Boarded here the "Olive," Wm. Courtney, Rose Blanche, Nfld., 23 tons, 6 hands, hook and line, the "Bertha M." and "Rowland" before spoken to the westward. Had to visit here a number of sick. They have all been down with the "grippe"; one death. They were fortunately attended to and nursed by Dr. Have, of Halifax, who is spending the summer on the coast in search of sport. Dr. Have has been all along the coast from Harrington to Blanes Sablons with the missionary and has visited and prescribed for all the sick. So that the people from Natashquan down have been fortunate in having skilled medical attendance where it was most needed. The cod-fishing here has been poor, and the people are only now getting fit to fish, they did nothing at all during the first run. Rowed down to Meccatina Harbour—at Léandre Michel's, all down here. Michel has within the last few days taken 200 cwt. of cod in his trap. Joined the ship off here at 4 p.m., and stood over to Big Meccatina Island where anchored in Big Island Harbour at 5 p.m. Strong south-west wind; cod fishing poor here. Boarded here—

"Manitoba," Coady, Fortune Bay, Nfld., 80 tons, 10 hands, H. and L. and trap; "Polar Bear," Wakely, Bonne Bay, Nfld., 50 tons, 10 hands, H. and L. and seine; "Louise" and "Rowland" before boarded at Harrington. These vessels will go on to eastward.

12th, Sunday.—At anchor in Big Island Harbour; strong south-west wind; at 8 p.m. wind veered to eastward with fog and rain.

13th, Monday.—Left at 6 a.m., and stood down the lead to Poacoachoo, where anchored at 9 a.m.; met here Overseer LeGouvé, who reports cod plenty from here to Chicatica; salmon fishing only beginning; more Nova Scotia vessels about than we have had for some years; they are all doing well; boarded—

Name.	Port.	Tons.	No. of Crew.	How Fishing.	Remarks.
Cymbeline.....	Lunenburg, N.S. ....	103	20	H. and L. and trap.	500 cwt. on board.
Beauty.....	La Have, N.S. ....	71	16	do ..	380 do
Capio .....	do .....	64	14	do ..	420 do

The two first arrived here on 25th June, the last on the 5th July. If the cod holds on, they will load by Saturday. On board at noon and continued to St. Augustin, where anchored at 1.30 p.m.; boarded here—

Name.	Port.	Tons.	No. of Crew.	How Fishing.	Remarks.
Ovando.....	Lahave, N.S.....	87	20	H. and L. and trap.	500 cwt
Nicanor.....	Lunenburg, N.S.....	78	16	do	500 do
West-side.....	do	53	13	do	400 do
Florence.....	Bonne Bay, Nfld.....	17	5	H. and L.	
Martyr.....	Cape Frail, do	15	5	do	
Young Brothers.....	Bonne Bay, do	15	5	do	
May Queen.....	do do	23	6	do	

The Nova Scotia vessels hope to load and get away in a week; all doing well to-day; also boarded again here the "Parsee" "Gleaner" and "Elizabeth" before boarded to the westward. Was called to attend Capt. Westhaver, of the "Nicanor," who is seriously ill. Left in boat at 3 p.m. to go in by Sandy Island and board some vessels seen inside where vessels do not usually anchor; boarded—

Name.	Port.	Tons.	No. of Crew.	How Fishing.	Remarks.
Guiding Star.....	Green Bay, Nfld....	39	9	H. and L. and seine.	These vessels have all loaded in here among the islands in shoal water, and are getting cleaned up to leave for home.
Lady Ridout.....	Bonavista do	22	8	do	
Mayflower.....	do do	29	12	do	
Lilly.....	do do	34	12	do	
Hiawatha.....	Cape Frail do	40	12	do	
Olivette.....	Bonavista do	43	11	do	
Romeo.....	do do	44	11	do	
H. F. Green.....	Cape Frail do	15	7	do	

They will, when home, land their fish, and return at once to continue a second voyage on the "Northern Labrador." Rejoined ship off Pointe à Giroux at 6 p.m.; at 6.30 p.m. rowed into Cumberland Harbour and boarded the "Escort," St. George's Bay, Nfld., 59 tons, 9 hands, H. and L.; she has been fishing to the westward; has only 10 cwt. on board; rejoined ship at 7.30 p.m., and ran down to L'Anse à Portage, anchored for the night at 8.30 p.m. Two Nova Scotian vessels had been in here and left to-day for St. Augustin; no other vessels about here. Fresh south wind all day with showers.

14th, Tuesday.—Fog in early morning—clearing at 8.30 a.m., ran down to Chicatica where anchored 9.30 a.m. Boarded here—

Name.	Port.	Tons.	Crew.	How fishing.	Remarks.
Virgesco..	Halifax, N.S.....	57	10	Hook & line & traps...	Has been a good deal of fish here but not much at present.
Valliant.....	La Have, N.S.....	87	20	do do	
Hunter.....	Notre Dame Bay, Nfld.	45	11	do do	
Minnie E. Strong..	do do	58	8	do do	
Sea Bride.....	Green Bay, Nfld....	28	6	do seine....	
Elizzie.....	do do	19	6	do do	
Stella.....	do do	36	11	do do	

On board again at 11 a.m. and continued to the eastward, at noon ran into Rocky Bay, when boarded the "Jabez," Bonavista, Nfld., 50 tons, 12 hands; a good deal of fish about here yet though the main school has passed. Left at 2 p.m., and at 3 p.m. came to anchor inside the Dog Islands, and rowed out to outer harbour when boarded—

Name.	Port.	Tons.	Crew.	How Fishing.	Remarks.
Ella Maud.....	Shelburne, N.S.....	54	14	Hook and line .....	They average about 300 cwt., having neither traps nor seines they have not done well.
Mayflower.....	La Have, N.S.....	59	14	do .....	
Vanilla.....	do .....	102	20	do .....	
Bessie A.....	do .....	99	21	do .....	

No fish about here now; these vessels propose to go north to continue the voyage, but having no twine they are not likely to do much. Returning to the ship met the "Valiant" coming down from Chicatica; she will try her trap at the Dog Islands. Left at 5 p.m. for Bonne Esperance, where anchored and landed at 7.30 p.m., rain and fog, still a few pieces of ice outside. Met Mr. Whitely; he reports good fishing though the ice has seriously interfered with the fishing; the last of the ice only left a week ago. There was a good deal of fish inshore before the ice backed up the last time, but now the fish are all out in deep water and nothing more will be done with the twine or the float line. Except at Bras d'Or where the ice spoiled the fishing, the spring sedentary seal fishing has been good. Returned on board at 9 p.m. Still a few sick about here, though the majority are well again.

15th, Wednesday.—Boarded here the following vessels:—

Name.	Port.	Tons.	Crew.	How Fishing.	Remarks.
Elizabeth .....	Cape Frail, Nfld ..	29	12	Hook, line and seine...	These vessels are all on their way east, they have been fishing up to the westward, and with the exception of the Jewel have all done well.
C. R. Ayer.....	Bonavista do .....	48	12	do do .....	
Brave .....	Catalina do .....	40	8	do do .....	
Lilly Joyce.....	Trinity do .....	20	7	do do .....	
Excel .....	do do .....	39	11	do do .....	
Rose Glee.....	do do .....	52	11	do do .....	
Island Bell.....	Bonavista do .....	49	12	do do .....	
Starlight.....	Trinity do .....	27	9	do do .....	
Mary Grace.....	do do .....	41	11	do do .....	
Larkspur .....	Pinder's Island, Nfld..	45	12	do do .....	
Maid of Valley...	Bonavista do ..	41	10	do do .....	
Green Leaf.....	do do ..	53	12	do do .....	
Mary .....	Trinity do ..	68	12	do do .....	
Elizabeth .....	do do ..	57	12	do do .....	
Susanna .....	do do ..	50	11	do do .....	
Jewel .....	Lunenburg, N.S.....	52	11	do trap.....	
Velox .....	Trinity, Nfld.....				
					Found no one on board.

Also "Romeo," "Parsee" and "Lilly," boarded to the westward.

Too thick outside to venture down among the ice to Bras d'Or. Set hands to-day with brushwood and brushes to try and clean the ship's bottom which is becoming rapidly foul and cutting down our speed.

16th, Thursday.—Left at 5 a.m. for the eastward; at 7.30 a.m., anchored off Long Point; paid the bounty cheques for here and L'Anse des Dumas. The action of the ice here has greatly interfered with both the spring seal and cod fishery. The vessels that usually carry on codfishing at the Gulch Cove here all left and gone on



North ; at 9 a.m. ran into Big Bras d'Or and anchored. Thick all day ; paid out the Bounty checks. Boarded here—

Name.	Port.	Tons.	Crew.	How Fishing.	Remarks.
O'Leander.....	Carbonnear, Nfld ...	64	14	Seine.....	
Henry West .....	do do .....	67	17	do .....	
Francis .....	Bonavista do .....	12	6	H. and L.....	
A. W. Dodd.....	Carbonnear do .....	75	18	Seine and trap..	
Pandora .....	Bonne Bay do .....		6	H and L .....	
Jessie .....	do do .....		5	do .....	
Penelope .....	do do .....		5	do .....	
Annie Laurie .....	do do .....		5	do .....	
Feronia.....	do do .....		6	do .....	

} Small hookers with no registers, only partly decked.

The ice came back up the straits on the 12th June and had been about the coast until the 8th July, so that in reality no fishing could be done. There was plenty of fish on the coast, but it only came in shore on the 12th July. The fish taken is of an unusually small run. Most of the vessels now on the coast will at once proceed to the outer Labrador, between St. Charles and the Moravian settlement. Had to visit a number of sick here, there was seven deaths, even the well ones are miserable and half-starved. These people at Long Point are the poorest and most enervated of the inhabitants of the Labrador, the most of them are actually imbecile.

17th, Friday.—Fog clearing. Left at 8 p.m. for Greenly Island, where anchored at 8.45 a.m., and boarded the following vessels:—

Name.	Port.	Tons.	Crew.	How Fishing.	Remarks.
Royal Arch .....	Trinity, Nfld...	50	11	Seine.....	
Bay State.....	Harbour Grace do ..	50	13	Trawler.....	
Aaron Perkins.....	Burin do .....	43	7	Seine.....	
Jessie .....	Bonavista do .....	42	12	do .....	
Wm. Mitchell.....	Fortune Bay do ..	41	5	Trawler.....	
Esther Thibault.....	do do .....	51	5	do .....	
Lady Thorburn.....	Trinity do .....	60	10	Seine .....	
Nellie.....	do do .....	47	10	do .....	
Billow.....	do do .....	65	12	do .....	
Seaway.....	do do .....	50	10	do .....	
Water Lily.....	do do .....	40	10	do .....	
Jessie .....	Carbonnear do ..	48	12	do .....	
Maude.....	Harbour Grace do ..	35	13	Hand and line ..	
Orange Lily .....	Trinity do .....	10	5	do .....	
Here I Am.....	No one on board ..			Trawler.....	
City Point.....	Carbonnear, Nfld..	48	12	Seine.....	
Jim.....	Hans Harbour do ..	38	9	do .....	
Mary Jane.....	Fortune Bay do ..	31	5	Trawler.....	
Little Jem.....	Burin do .....	44	6	do .....	
Mervyn.....	do do .....	33	5	do .....	
Forrest Belle .....	Trinity do .....	40	10	Seine.....	
Kestrel.....	do do .....	38	11	do .....	
Starlight.....	do do .....	40	9	do .....	
M. Florence.....	Fortune Bay do ..	36	8	Trawler.....	
Olivia.....	Conception do ..	48	11	do .....	

Also here the "Rosina," "Elizabeth," "Brave," "Parsee," "Excel," "Mary," "Rose Clare," "Susanna" and "Island Belle" before boarded to the westward ; landed on Greenly Island on Messrs. Jobb Bros. room ; fishing poor to date ; saw lighthouse-keeper, all well at light, looking daily for the "Alert;" crossed to Isle au Bois where I had been sent for to settle some trouble among Penny Bros.' fishermen who have been

in a state of mutiny; landed and had a talk with the men, advising them to keep order and return to duty. As this is in Newfoundland territory I could do no more. Crossed to Blancs Sablons and called at fishing rooms and on Collector of Customs, to enquire what the Newfoundland customs authorities intended doing this season with our fishermen. The collector says his orders are to collect duties on salt and barrels as usual. Returned on board at 4.30 p.m.; found a message from the keeper of the Forteau Light, saying they wanted medical assistance, as all hands were sick; ran down to Forteau where anchored and landed at 6.40 p.m.; found one dead, others mending; gave them medicine and returned on board at 8.30 p.m.; held on here for the night.

18th, *Saturday*.—Left at 5 a.m. for the westward; called at Blancs Sablons for mails and telegrams which we deliver at the nearest telegraph office. Continued to Belles Amours where anchored at 8.30 a.m.; boarded here—

Name.	Port.	Tons.	Crew.	How Fishing.	Remarks.
Ernest.....	Trinity.....	45	8	Seine and trap..	They have done well last two days; will leave on Monday for outer Labrador.
Ocean Queen.....	Bonavista.....	38	11	Seine.....	
Delta.....	Green Bay.....	67	9	do.....	
Queen of the Fleet.....	Green Pond.....	56	11	do.....	
Violet.....	Bonavista.....	25	11	do.....	

Also here “Bismark,” “Hiawatha” and “Dash” boarded to the westward; continued to Middle Bay where anchored at 12.15 p.m.; boarded here the—

Name.	Port.	Tons.	Crew.	How Fishing.	Remarks.
Pearl.....	Trinity, Nfld.....	40	11	Seine.....	Done well last few days; no fish to-day; vessels will all go north on Monday.
Druid.....	do.....	70	14	Seine and trap..	
Annie.....	do.....	68	14	do.....	
Speedy.....	Burin, Nfld.....	33	6	Trawl.....	
Flying Cloud.....	do.....	18	5	do.....	
Ruby.....	Trinity, Nfld.....	30	9	Seine.....	
Sweet Briar.....	Burin, Nfld.....	30	7	do.....	
Juliette.....	Bonavista, Nfld.....	38	9	do.....	
Constance.....	Green's Pond, Nfld..	49	13	do.....	

Also here the “Maid of the Valley” before boarded. Local fishermen have done fairly well though greatly bothered by the ice; on board at 2 p.m. and left for Stick Point where anchored at 3.30 p.m. Went round in boat to Stick Point, Salmon Bay, Pidgeon Island and Bonne Espérance, where rejoined the ship at 6 p.m. At Stick Point and Pidgeon Island fishing has been poor, but at Salmon Bay the fishery is the best since 1881, it was all made with the seine. Salmon fishing has been good lately, but when the ice came in all nets had to be taken up. Landed at Mr. Whitely's at 7 p.m.; no fish to-day; the capelin school has passed; fishing after this will all be done off shore, by boats in deep water with the hook and line with lance for bait; vessels all gone from here.

19th, *Sunday*.—At anchor in eastern harbour of Bonne Espérance all day.

20th, *Monday*.—Half a gale from south-west with thick fog and heavy sea; had to let go a second anchor.

21st, *Tuesday*.—Same weather continues this a.m.; at 1 p.m. cleared up, got in anchors and left for westward. In the run, at 2 p.m., met the “Valiant” bound for outer Labrador, she had done nothing since we passed down on the 14th. All the schooners at Dog Islands are going on down to the Big Labrador; advised them all



to call at the Custom-house at Blancs Sablons and settle with the collector; getting proper papers so as to have no further trouble below; collected their mails and continued west; stood in behind Chicatica. Some vessels here have caught some fish lately, but the capelin run is over and there will be no more fishing in-shore. Continued to St. Augustin where anchored at 6 p.m. All the Esquimaux Point fleet are now here, they have an average of about 80 cwt. They will take no more cod as the float fishing is over; they all intend going down to Bras d'Or and holding on for the herring fishery; boarded the "Lottie," S. E. Teel, Port Medway, N.S., 81 tons, 18 hands, hand and line, and cod trap, has 550 cwt. The rest of the Nova Scotia fleet here have done fairly well, having from 600 to 850 cwt. They will hold on here a little longer. The "Garland" and "Magic" which I boarded at Whale Head are now here. Several of the vessels have men down with the gripe; Captain Westhover, of the "Nicanor" is no better, the vessel will go home at once (Captain Westhover died after reaching Halifax). A few herring have been taken in nets here lately; collected the mails from the Nova Scotia and Esquimaux Point vessels; held on here all night.

22nd, *Wednesday*.—Left at 5 a.m. for Poacochoo where called at 7 a.m.; landed a party here with a coffin which we had made on board to rebury the body of a man which was exposed on one of the islands. Report on the coast says that this is the body of a man who escaped after the rebellion in '37, and came down here to avoid arrest. Same Nova Scotia schooners here as we saw on the way down, they have about 800 cwt. each. Overseer Legouvé reports fair salmon fishing in the inside nets; the outer ones have done badly. Continued 9 a.m. for Big Meccatina, where called at noon; no vessels here and none now to the westward of this. A few herring taken the last few days. Continued to La Tabatière where anchored at 1 p.m.; not much fishing done here, people only getting fit to be about again; on board at 2 p.m. and left for Mutton Bay, where anchored and landed at 3.30 p.m.; all getting better; boats now average 55 cwt. on the hook and line alone, most of this taken in deep water; would have made a big fishing here had it not been for the sickness. Arrested George Mainsbridge and tried him here for theft, sentenced him to six months in Percé jail. Left at 6 p.m. for Whale Head, where anchored at 7.30 p.m.; a few herring seen here lately; no cod or capelin; sick all recovering.

23rd, *Thursday*.—Left at 5 a.m. for Harrington, where anchored at 7 a.m.; no vessels about; sick all better; a school of large herring seen here yesterday; a few cod still on the reef, but after this the fishing will be all in deep water with herring or clams. Left at 8.20 a.m. for the west. At 4 p.m. sighted a large schooner, not a fisherman, standing out of Washeecootai Bay. She was sailing too fast for us to overhaul, decided to run into Washeecootai and see if any one else was in there, this being one of the seldom visited bays where the smugglers from St. Pierre are said to transfer their cargoes to the local vessels. While going into the bay slowly with the lead going, touched slightly on a rock where we expected to find 12 fathoms; the ship did not strike hard but simply rubbed sideways against it; we had been going slowly, the lead giving 10 fathoms; no bottom. Came to anchor inside at 5 p.m., when Captain Belanger went back in the boat to look for the rock. We had often passed in and out here before and never got shoal water. He found a point of rock with only six feet of water, and 10 fathoms; no bottom all around it; took the bearings and returned on board at 7 p.m., when we moved further into the bay for the night, as the weather looked threatening; no vessels in the bay.

24th, *Friday*.—Strong south-east wind with heavy sea, saw the rock break plainly; built a beacon which should bear north-east to clear the rock. Held on here all day.

25th, *Saturday*.—Left at 5 a.m.; strong south-south-east wind with rain and fog; made English Point, and at 11.30 a.m. ran into Natashquan and anchored. Fishing over, all the men on the room gone home; they did well, but should have remained here longer as the local boats are still catching fish; 10 south shore boats in 28 days' fishing cleared over and above all their advances and charges, \$2,426, while 17 Esquimaux Point boats, averaging 22 days fishing, under similar circumstances,



cleared, \$2,640. The best of the Esquimaux Point boats made 160 cwt. of fish, the average being 120 cwt. This, in boats fished by two men, or often only a man and a boy. While the boats have been making this good fishing, the vessels that passed here nearly a month ago, and which we left in St. Augustin on Tuesday last, have an average of only 80 cwt. with crews of 8 or 10 men. If the fleet of schooners had remained here and fished with any energy they might all have loaded easily. Rebuilt the beacon on Beacon Island, which had fallen down this spring, and at the request of the local fishermen, put a beacon on American Island; rain and fog all day, with strong south-east wind.

*26th, Sunday.*—Same weather, thick all day.

*27th, Monday.*—Thick in the early morning, clearing at 8 a.m.; when left for Esquimaux Point; came on thick again as soon as we got outside; ran our distance at 4:30 p.m.; stopped ship; sounded in 35 fathoms; stood in slowly for the land; shoaling the water gradually; at 5:10 p.m. anchored in 13 fathoms; calm with thick fog.

*28th, Tuesday.*—Fog lifted at 5 a.m.; ran into Esquimaux Point and anchored at 5:30 a.m.; landed at 7 a.m.; all the people from here that have been working in the lobster canneries, at Anticosti, have returned. Except at Fox Bay and on the south shore of the Island, the lobster fishing has been a failure. The boats from here, that fished at Natashquan, are all back here, and have been out fishing off here for the first time here to-day. There is a good show of fish. Sick all getting better; delivered here, telegrams and letters that we had brought up from below; heard here of the wreck of S.S. "Circe," at East Point, Anticosti. At 9 a.m. left for Mingan, where anchored at noon; Indians all well again; anglers all left the rivers; cod-fishing to the west, reported good everywhere; Overseer Duguay better and gone up the coast; on board at 1 p.m.; left for West Point, at Anticosti, where anchored and landed at 5 p.m.; all well; poor fishing; found here one whaler which the "Albert" had brought down from Quebec for us; found her here with her bottom stove in, and damaged in several places. She was in good order when we left her in Quebec. We have no explanations here as to what has happened to her. The damages have been clumsily patched, and daubed over with putty and different colored paint. Returned on board at 6 p.m., and left for Sheldrake, where anchored off the river, in 8 fathoms, at 9.45 p.m.

*29th, Wednesday.*—Landed at 6 a.m.; called on all the fishing rooms; boats average 80 draughts; fish plenty; traps have done nothing this year, as the fish did not come inshore; on board at 9.15 a.m. and left for Thunder River, where came to anchor at 10.10 a.m.; on letting go the anchor the chain parted at the 15-fathom shackle; buoyed the spot and let go the other anchor; set two boats to drag for chain at noon, got fast to the anchor and got it and the chain on board; fishing good here; the trap net set by Messrs. LeBoutellier Bros. has taken 323 draughts; the trap is supplied by the firm; the fishermen take three-quarters of the fish, one-quarter goes to the trap, and the fishermen pay their proportion of the fee. On board at 1.15 p.m. and left for Magpie, where anchored and landed at 3 p.m.; doing well here; if fishing holds on as at present for another 10 days, will make a big fishery; also doing well with cod at River St. John's. The salmon net fishermen who fish the estuary of the St. John's have gone home, they only took 27,000 lbs, having been two weeks too late in getting over. Left at 4 p.m. for Long Point, where anchored and landed at 6 p.m.; fishermen doing well here; called at telegraph office, operator says he reports regularly to the Intelligence Bureau at Halifax—he says the cod fishing is good all the way west to Godbout. On board at 8 p.m., and left for north and east coast of Anticosti.

*30th, Thursday.*—Made the land abreast of Mauzerolle at daylight, anchored and landed at 5.30 a.m. Lobster cannery has been pulled down and taken away; Dawson only put up 47 cases; he closed on the 23rd June. At Cow Point above, Hubert and Thériault closed during the first week of July; there are no lobsters worth fishing for about this part of the Island. At Ellis' Bay, Dobbett & Co. did well, with only 19 hands in all canned 500 cases; unfortunately, on the night of the 18th July

the cannery was burned and only 150 cans saved. The other canneries are all closed. The one at Salmon Bay has not done well; that at Fox Bay has done very well. About 75 per cent of the traps fished have been lost, owing to rough weather and want of shelter. On board at 6.30 a.m., and left for Salmon Bay; 6.45 a.m. wind veered to S.E., with fog and rain; had to haul off shore; stood on down, intending to call at wreck of SS. "Circe" at noon; distance run to clear East Point; stood to the south, sounding at intervals; at 4.45 p.m. had crossed the East Point bank into deep water; shaped course for south shore at Percé; did not hear Heath Point gun.

31st, *Friday*.—Anchored in Percé Roads at 4.45 a.m.; landed at 8 a.m.; fishing slack; bait scarce; a few squid taken last few days; all along south shore bait is scarce. At Newport the Messrs. Robin put up last winter a freezer, in which to keep frozen spring herring; when other bait is not to be had this herring will be served to the boats; those who have tried it find it answers well, and some boats have done fairly fishing with no other bait. Landed here prisoner and turned him over to the gaoler; on board at 10.30 a.m. and left for Grande Grève, where called at 1.30 p.m.; fishing from here, up the south shore to Ste. Anne's, is poor; bait everywhere scarce; weather has been cold and rough; on board at 2 p.m. and ran into Gaspé, where anchored at 4 p.m.; at 6 p.m. blew off the boilers; a few mackerel being taken here.

*August 1st, Saturday*.—Scaling boilers and cleaning bottom of ship.

2nd, *Sunday*.—At anchor in Gaspé; began work on boiler at midnight.

3rd, *Monday*.—Refilled boilers and began getting up steam; steam up at 4 p.m.; was here ordered to report to Capt. Gordon for the month of August; wired Capt. Gordon on Saturday, but had no answer; 4.25 p.m. left Gaspé and anchored off Little Gaspé at 6.10 p.m.; poor cod fishing; no bait; a good many mackerel taken with the hook in the Bay to-day; "Agnes Macdonald" has been here twice; D. S. "Acadia" once since we left; no United States mackerelers seen about.

4th, *Tuesday*.—Left at 6 a.m. for Percé where anchored at 10 a.m.; fishing poor; no bait; on board at 12.20 p.m. and left for Malbay where anchored and landed at 1.45 p.m.; fishing poor; over 50 boats from this part of coast here gone over to the wreck of the "Circe" to pick up wrecked goods. The customs officer from Percé is here watching their return; on board at 4 p.m.; at 6 p.m. left for Douglastown where anchored at 8 p.m.

5th, *Wednesday*.—Went into Gaspé and anchored at 6 a.m.; crew took part here to-day in the annual regatta; received orders from Capt. Gordon to proceed to Pictou and coal, and meet him at Georgetown, Monday.

6th, *Thursday*.—Left Gaspé at 7 a.m. for Pictou; crossing over Orphan and Buadel banks; saw no fishermen.

7th, *Friday*.—Rounded East Point, P.E.I., at 7 a.m.; a few fishing vessels off East Point; spoke cutter "Agnes Macdonald" in company; stood on for Pictou, where anchored at 3.30 p.m. Called on Messrs. Noonan and Davis; we are to get coal to-morrow.

8th, *Saturday*.—Steamed down to Acadia mine dump at 7 a.m.; took in 63½ tons Acadia coal and 54 tons Albion; finished coaling at 6.35 p.m.; hauled out into stream and anchored at 7 p.m. Strong N.E. wind with rain.

9th, *Sunday*.—Same weather at anchor in Pictou.

10th, *Monday*.—Washing down and cleaning; "Acadia" arrived at noon; received orders from Captain Gordon to cruise from River St. Lawrence, south along New Brunswick shore to Richibucto, including the west coast of Prince Edward Island. Headquarters for mails, Gaspé. Telegrams at Port Daniel. Left Pictou at 1.30 p.m.; at 4.30 p.m. appearance of dirty weather ran into Georgetown and anchored at 5.20 p.m. "Acadia" and "Agnes Macdonald" ran in at 8 p.m.

11th, *Tuesday*.—Fog in early morning; clearing at 7.10 a.m.; left for north side of Island; rounded East Point at 10.40 a.m. No large fishing vessels in sight; at noon come on thick; at 1 p.m. stood inshore; at 1.10 p.m. come to anchor in 10½ fathoms; thick all day; at 9 p.m. fog lightened a little, made out a steamer; anchor lights a few miles west of us.



12th, *Wednesday*.—Steamer to west of us is D. S. "Stanley;" 4.10 a.m., steamed alongside of her, and delivered to Capt. Finlayson his orders; continued along shore to west. "Stanley" standing to eastward; calm all day with showers; no vessels; no sign of mackerel; rounded North Cape at 4.25 p.m., and stood along shore coming to anchor off Cape Wolf in  $7\frac{1}{2}$  fathoms; at 7.45 p.m. squalls and rain with thunder and lightning.

13th, *Thursday*.—Under weigh at 4.40 a.m.; stood over to Richibucto Head and round up to Escuminac Point where anchored and landed at 8.50 a.m. Called at the light; keeper reports mackerel fishing improved last few days, boats averaging from 200 to 300; those taken on jig are small; a number of large ones taken in the nets. Fishing better down towards Richibucto Head than Miramichi Bay; on board at 10.30 a.m. and left along New Brunswick shore for the north; rounded Miscou at 6 p.m.; strong N.W. all day; saw no mackerel fishermen, only a few small craft fishing cod off Miscou; anchored in Port Daniel Bay at 9.30 p.m.

14th, *Friday*.—Landed at Port Daniel at 8 a.m.; a few mackerel taken in herring nets, cod fishing fair, salmon fishery had been fair and the lobster fishery good. A great many smelt now in the Bay, fat and in good condition. Squid getting plenty; on board at 11 a.m. and left for Port Daniel West where landed, and saw Overseer Phalen, asked him to see that smelt were not seined. He reports a large school of mackerel off Paspebiac; on board at 1.30 p.m. and stood over to the New Brunswick shore, and up past Caraquet; a few boats out mackerel fishing here, they report plenty of mackerel in the Bay, but they do not school and will not bite; stood back over to Paspebiac where anchored at 6.10 p.m. Reports in to-day from north shore say cod fishing is first-class all over. The average is better on the north shore from Natashquan to Pointe des Monts, than it has been for several years. At Percé the fishing is fair, but from Percé up here it is below the average; now that the squid has struck, it is hoped that the cod fishery will improve. Weather squally all day with showers.

15th, *Saturday*.—Left at 4.45 a.m.; slight frost last night; rounded Miscou at 10 a.m., and shaped course for North Cape, P.E.I.; between Miscou and North Cape passed eight cod bankers at anchor (trawlers). Made North Cape at 5 p.m.; strong south-east wind, sea making; stood to westward of North Cape and came to anchor off Nail Pond at 7.15 p.m.; vessels running in under this land for shelter.

16th, *Sunday*.—Wind veered during night to south-south-west, with squalls and rain; cleared up and was fine all day. Boats here have done fairly well; some of them have 30 brls. of mackerel. Though the mackerel are not as plenty as they were three weeks ago, they are larger and fatter. Crew landed and marched to church at Tignish.

17th, *Monday*.—Left at 4.40 a.m. and stood back to Miscou; boats were out and catching mackerel when we passed North Cape at 4 a.m. Off Miscou at 1 p.m.; sighted a large schooner down towards Shippegan Gully; stood over for her, but found her to be a large freighting schooner; put about and stood over to Newport, when came too and landed at 4 p.m. Cod fishing fair; examined the freezer put up by Messrs. Robin. Fishermen are taking more kindly to the frozen herring. Some inshore boats have used no other bait all season, and are getting used to it. They have done well with it. It can be kept under cover in the boats in a frozen state for 24 hours. It does well on trawls. Several Nova Scotia bankers have called here to buy it. They say it will do admirably, and if they were always certain of getting it, they would never loose time looking for any other bait. Returned on board at 5 p.m.; ran round to Big Pabos, where anchored and landed at 6 p.m. Called at Messrs. King Bros. saw-mill. There is no difficulty at this mill now, as Mr. McNaughton has arranged to have all refuse burned.

18th, *Tuesday*.—Fog in early morning; clearing at 6.10 a.m.; got in anchor and stood down along the land for Percé; fog at intervals all morning; stood out round Bonaventure Island; getting thick again; stood in to South Beach, Percé and anchored; boarded here "Henry N. Bachelder," of Port Medway, N.S.; 99 tons, 19 hands; banking on Miscou and Orphan Bank; in for bait; out since 20th April;



has 1,600 cwt. on board; reports fishing fair. Returned on board at 4.10 p.m., and left for Gaspé Bay to meet D.S. "Acadia"; thick with rain and squalls. At 6.45 p.m. sighted "Acadia" making the bay; stopped ship and waited for her; when she came up proceeded in company to Gaspé, where anchored at 8.30 p.m. Called on Capt. Gordon on board "Acadia."

19th, *Wednesday*.—"La Canadienne" left Gaspé at 6.30 a.m. for Paspebiac. I joined the "Acadia," leaving Gaspé at 9.30 a.m. We proceeded to Newport, where, at 3 p.m., I landed with Captain Gordon, who wished to enquire into the construction and working of the freezer put up by the Messrs. Robin for conserving spring herring for bait. We returned on board the "Acadia" at 4.30 p.m. and proceeded to Paspebiac, where I rejoined the "La Canadienne," and the "Acadia" continued to Charlottetown.

20th, *Thursday*.—Left Paspebiac at 4.45 a.m.; rounded Miscou at 10 a.m., and continued along the New Brunswick shore to Miramichi Bay, where anchored at 6.10 p.m.; saw no fishing schooners.

21st, *Friday*.—Under weigh at 5 a.m.; stood round Escuminac Point, intending to look for lobster traps reported set in Richibucto Bay; but blowing too hard to do anything, stood over to Cape Wolf and along shore to North Cape, P.E.I.; blowing a whole gale from south-west; rounded North Cape at 1.30 p.m., and bore up for Tignish, where anchored under the land at 4 p.m. in  $4\frac{1}{2}$  fathoms; gale moderate towards sunset, with rain.

22nd, *Saturday*.—Up anchor at 4 a.m.; heavy rain; passed North Cape at 4.45 a.m., and stood over to Miscou; strong south-west wind; Miscou abeam at 2 p.m.; crossed to Port Daniel Bay, where anchored at 4.40 p.m. No fishing done last two days.

23rd, *Sunday*.—At anchor in Port Daniel Bay; crew attended church.

24th, *Monday*.—Boat ashore at 5 a.m. to get supplies, returning at 7 a.m.; left for North Cape, P.E.I.; off Miscou at 10 a.m.; half a gale from north-east, with heavy sea; put about and ran back to Paspebiac, where anchored at 1.10 p.m.; boats ashore taking in fresh water. At 2 p.m., gale freshening, had to let go a second anchor.

25th, *Tuesday*.—Weather moderating; thick all morning; clearing at 12.35 p.m.; left for Miramichi at 1.30 p.m.; fog again; light east wind; stood in to make Miscou whistle, which did, and anchored at 5.30 p.m. west of the Point in 10 fathoms; thick all evening; saw large school of mackerel.

26th, *Wednesday*.—Fog lifted at 1 a.m., and wind veered to north north-west, with rain and thunder at 4.45 a.m.; got up anchor; stood round Miscou and kept on along the New Brunswick shore; no fishing schooners; boats running out from Shippegan and Tracadie gullies; passed Escuminac Point at 2 p.m., and anchored in Kouchibouguac Bay in 6 fathoms off the mouth of the river. Capt. Belanger proceeded in whaler as far as Sapin Ledges, and myself in gig as far as Richibucto Head, looking for lobster traps, which were reported to be set in the Bay. We neither of us found any; returned on board at 7 p.m.; saw mackerel schooling.

27th, *Thursday*.—Left at 4.50 a.m.; passed a number of fishing boats of Richibucto Head; report cod and haddock abundant, but mackerel scarce since last Friday's blow; stood up along west shore of Prince Edward Island; North Cape abeam at 11.30 a.m.; shaped course for Miscou, which point rounded at 7 p.m., coming to anchor in 6 fathoms under North Point off Miscou; saw a few small schools of mackerel.

28th, *Friday*.—Fog in early morning; lifting at 6 a.m.; left for Caraquet, where anchored and landed at 9 a.m. Cod fishing below the average; a good many mackerel taken between here and Bathurst. The fishermen say there is any amount of mackerel, but that it does not bite freely. This mackerel is sold here and shipped fresh by rail. Returned on board at 1 p.m.; left for Port Daniel Bay, where anchored at 4 p.m.; light east wind, fog and rain.

29th, *Saturday*.—Left at 6 a.m.; fog in early morning; strong south-west veering to west; anchored at Grand River at 9.30 a.m.; poor fishing. The Miscou Bank boats

have done badly, both bait and fish being at times scarce, and owing to the change in the Tickle, boats have great difficulty in getting in and out. The wharf has been left, owing to want of funds, in an unfinished state, as it is now a southerly gale might completely ruin it, and cause damage to the boats inside of it; storm warnings up for a southerly gale; at 3.45 p.m. ran into Gaspé and anchored.

30th, *Sunday*.—At anchor in Gaspé; strong south-east wind; left Gaspé at 9.30 p.m. for Miscou.

31st, *Monday*.—Passed White Head light, Percé, at 1.20 a.m.; abreast of Miscou at daylight; no vessels in sight; stood over for Cape North, P.E.I.; anchored and landed at Tignish at 1.30 p.m. Mackerel fishing has been fair here and at Nail Pond for the past week. Some boats have taken 1,500 in a day. Cod fishing poor. Local fishermen complain that the large boats from New Brunswick run in between the entrance wharves at Tignish, and so block the entrance that they can neither get in nor out; these foreign boats refuse to move and make room for others. Complaint was also made by the master of the schooner "Lavinia," that on the evening of Monday last, the 24th inst., he was standing in for Miramichi Bay, during a strong north-east wind with fog, trying to make the Escuminac fog whistle; he stood on until he found himself close to the reef in 3 fathoms, when he found out his position by seeing the breakers; at the same time he made out the light, and was able to put about in time to save his vessel. He declares himself prepared to swear that the fog whistle was not blowing. Some time after, when he had worked further off shore, the whistle began to blow, and he heard it distinctly. He had at Miscou on the date mentioned strong north-east wind, fog and rain. On board at 2.30 p.m.; stood round North Cape up along the west shore and anchored off Cape Wolf at 7.10 p.m.

September 1st, *Tuesday*.—Under weigh at 4.45 a.m.; ran across to Escuminac Point and up along the New Brunswick shore to Miscou; saw no large fishing vessels; many boats out cod fishing; crossed over to Cape Despair and anchored in Cape Cove at 6.15 p.m.; landed. Cod fishing here to date is below the average. Returned on board at 8 p.m.

2nd, *Wednesday*.—Left at 5.45 a.m.; stood out round Bonaventure Island; no boats out; strong east wind with some sea; stood on to Flat Island where called at 8 a.m. Light-keeper reports D. S. "Acadia" passed in; ran into Gaspé; anchored at 10.45 a.m. Called on Capt. Gordon and reported; was released from his service; returned on board and instructed engineer to blow off boilers with the view of making necessary repairs, as boiler has lately been leaking into both furnaces. D. S. "Acadia" left Gaspé this evening.

3rd, *Thursday*.—Pulled down furnaces; began to plug and caulk the cracks.

4th, *Friday*.—Same work, crew cleaning and painting.

5th, *Saturday*.—Finished caulking; rebuilt bridges; refilled boilers and began firing up.

6th, *Sunday*.—Got up steam; boiler is tight. Left Gaspé at 7.45 p.m. and stood out for Baie des Chaleurs; strong south-east with sea making; appearance of bad night; came to anchor on Douglastown Bank in  $7\frac{1}{2}$  fathoms at 9.30 p.m.

7th, *Monday*.—Fresh breeze from south-east with fog and heavy swell; cleared at 11.30 a.m.; got in anchor and stood out; heavy sea; no landing any where; stood inside Bonaventure Island and up the Bay to Port Daniel, where came to anchor at 8 p.m.; no boats out any where to-day.

8th, *Tuesday*.—Heavy roll all night; under weigh at 4.30 a.m.; wind round to N.W.; no landing any where; stood right up the Bay to Maguacha; anchored off Nouvelle at 2.30 p.m.; landed and saw Overseer Cyr. Salmon fishery been below average; lobster fishing in Carleton Bay good; in Maria a failure. On board at 4 p.m. and left for Dalhousie where anchored at 5 p.m. Strong north-west.

9th, *Wednesday*.—Left ship at 7 a.m. and proceeded by rail to Campbellton; crossed to Cross Point and met Overseer Verge; enquired with him into matter of salmon nets in Restigouche; left at 1.30 p.m. and drove down to Dalhousie; rejoined ship at 6 p.m.



10th, *Thursday*.—Left Dalhousie at 4.45 a.m.; ran down to New Carlisle, where anchored and landed at Overseer Smith's at 10.45 a.m. Salmon fishery been below an average; lobster fishing good. Instructed him as to bounty claims; returned on board at noon and continued to Paspébiac, where anchored and landed at 1 p.m. Latest returns from north shore, say cod fishing continues good. Fishing from Percé up is still below the average. Weather rough lately; boats seldom able to go out. On board at 2.30 p.m.; continued to Port Daniel, where called to see Overseer Phalen at 4.10 a.m. Fishing slack just now. On board at 6 p.m. and left for Magdalen Islands. Miscou light abeam at 9 p.m. Set course for the Deadman. Strong south-west and cross sea.

11th, *Friday*.—Strong breeze and heavy tumble all night; passed the Deadman at 9 a.m.; ran round Entry Island and anchored off Amherst. Saw Mr. Keating re his complaint; his nets were not disturbed for being in the water during the day time; several of them, however, have been carried away and lost, and his buoys and moorings cut. He accuses the "Cora May" of having carried away some of them, others he believes have been found by people at Amherst who are concealing them. Mackerel fishing has been good. Landed at Amherst at 3.30 p.m. Had an unusually heavy north-east gale here on Monday night; several boats been carried away and lost. Lobster fishing has been good, though several factories did not reopen after the grippie. The extension granted was not of much use, as after the mackerel struck fishermen would not return to the lobster fishery. Cod fishing has been good when the boats could get out; the weather has been rough lately; the yield of cod will be much greater than last year. Mackerel fishing has been good, about same as last season, but the price is not so high. Summer herring not quite up to average. Hay is a short crop, but other crops promise well, especially potatoes and oats. Local fishermen besides passing a law against allowing nets to be set in the day time, are about to pass one prohibiting the use of the purse seine. No United States vessels called at Customs since our last visit. Three Nova Scotia mackerel seiners here, but no United States ones. Returned on board at 6.30 p.m.

12th, *Saturday*.—Got up anchor at 5 a.m. and ran over to Cap aux Meules, where anchored and landed at 6.30 a.m. Mackerel and cod fishery good. Was informed here that parties were fishing lobsters in the lagoon at Grand Entry and canning them in the woods. Left at once for Grand Entry, where anchored and landed with two boats at 9 a.m. No one at Grand Entry would give me any information. Rowed on into the eastern end of the lagoon; found and destroyed about 400 lobster traps, saving the trawl line. Most of these traps had evidently been left in the water at the close of the ordinary fishing season. They were not baited and had no lobsters in them. About 100 traps on two lines of trawls were freshly baited and had lobsters in them. These lobsters were of good size and in good condition. Went ashore with one boat's crew, searched the woods and the houses and stores of the inhabitants, but found no trace of canning operations. This work must be done in the woods, and there can be no doubt that it is done with the assistance and connivance of some of the large cannerys. Returned on board at 5 p.m.; left to return to Gaspé; rounded North Cape at 8 p.m. and set course for Gaspé Bay.

13th, *Sunday*.—Ran into Gaspé and anchored at 1.45 p.m. Received here telegraphic orders, Ottawa 9th September, to proceed to Heath Point and bring over a wounded man. Found that in the meantime the man had been brought over here in the steam schooner "Annie McGee," and that the man had died soon after being landed.

14th, *Monday*.—Left Gaspé at 6.30 a.m.; anchored and landed at Cape des Rosiers at 9 a.m. to settle dispute as to site of a fishing stage between John Rifou and George Bond. Heard both sides and fixed boundaries for the stages on the beach. Fog all this morning with wind and sea coming from north-east. No use going over to Heath Point to enquire into cause of the accident there, decided to go up the river to Pointe Sèche. Left for Pointe Sèche at 11 a.m., but at noon off Griffin Cove breeze freshening and sea making, no hope of being able to land there; put about and ran



back to Little Gaspé Cove, where anchored for shelter at 2 p.m.; strong north-east with rain, fog and heavy sea.

*15th, Tuesday.*—Clearing at 3 a.m., left for Heath Point, Anticosti; strong east-north-east with heavy easterly swell; anchored under Heath Point in the West Cove at 5:30 p.m.; landed at light, enquired into the cause and manner of the accident. Found that on the evening of Monday, the 7th instant, Arthur Lemire, aged 22, a native of Nicolet, Que., for two years assistant to Gagné, the light-keeper of Heath Point light, while engaged firing the fog gun at 4:30 p.m., had been wounded by being blown from the muzzle of the gun. He had loaded the gun, and after pulling off two friction tubes, and the gun failing to go off, had gone outside the gun house to the muzzle of the gun, and was in the act of driving the charge further home when the gun went off, blowing him over the bank on to the beach below, a distance of 12 or 15 feet, the right hand, with which he held the rammer, was lacerated and the forearm broken and contused above the wrist. Gagné, the keeper, was in the porch of the tower at the time. he heard the cry and ran out; the wounded man had picked himself up and was walking up the bank holding his wounded arm when Mr. Gagné reached him. The man sat on the top of the bank for a few minutes and afterwards got up and walked into the tower. Gagné at once telegraphed to Mr. Gregory asking for help; he had an answer from Mr. Gregory next morning Tuesday the (8th) saying that Mr. Gregory could furnish him no assistance. Gagné then wired the Department at Ottawa saying that he had a chance of sending the man to Gaspé by a schooner. To this he had two replies the same afternoon, one from the Minister saying that "La Canadienne" had been ordered to go at once to his assistance, and another from the Deputy, Mr. Smith, telling him to send the man over to Gaspé at once. As the man did not seem to be very bad, and as they expected "La Canadienne," they did not at once send the man by the schooner. Next day, Wednesday, and the following day, Thursday, that is the 9th and 10th, it was blowing fresh and not possible to put the man on the schooner. On Thursday evening, about dusk, the weather having moderated and there being no news of "La Canadienne," the man was put on board the schooner and she left at once for Gaspé. The schooner was the steam wrecking schooner "Annie McGie," Captain Caouette. The schooner arrived at Gaspé on Friday evening the 11th, landed the man that evening and he died at 9 a.m. next morning. Both, Mr. Gagné, the keeper, and his sister, are positive in saying that it was not possible between Tuesday evening and Thursday evening to put the wounded man on board the schooner. When he did leave on Thursday evening he was able to walk from the tower to the boat on the beach. They say that all was done for the young man that could be done under the circumstances. The man had fired the gun hundreds of times, and knew the risk he ran in doing as he did. I thought it my duty to enquire into all the facts of this case as the man was wounded in the service of the Department. Mr. Gagné has secured another competent assistant. Returned on board at 7:30 p.m. Held on here; too much swell on to land at Fox Bay.

*16th, Wednesday.*—Left anchorage at 5 a.m. for Fox Bay and north side of island. Stood round East Point; met heavy head sea and strong west north-west. No hope of landing on north side of island, and ship making no headway; at 6:15 a.m. put about and stood up along the south side of the island. Strong north-west wind all day with heavy sea. Hauled across in evening for south shore and anchored under Cape des Rosiers at 9 p.m.

*17th, Thursday.*—Under weigh at 4:45 a.m. for Point Seche, where anchored and landed at 10 a.m. Fishing poor. Heard both parties in dispute between Bernache and Labrecque. Labrecque need not move his flakes. The cause of dispute between Dery of St. Thomas and Thomas Labrecque of this place has been settled, and Dery is satisfied. This was the case which Mr. Choquette, M.P., had applied to have settled. On board at noon. Ran down to Grand Etang, where anchored, and landed at 2 p.m. Fair fishing here. On board at 4 p.m. Held on here.

*18th, Friday.*—Left at 5:45 a.m. Ran down to Fox River where anchored, and landed at 9 a.m. Had been called here by the municipal council to decide a dispute

as to right of way to the beach. The question, however, was one entirely out of my control. Fishing better than for several years. Halifax traders are here buying dry fish and giving from \$4.50 to \$4.60 without any cull. On board at 12.30 p.m.; blowing a gale off the land, with rain, thunder and lightning. Left for Grisford's Cove at 1 p.m., but could not land there. Stood round Cape des Rosier. Heavy sea to Cape Gaspé; stood into the bay. Outside the lightship was signalled to come to aid of schooner "James Dwyer," she had lost both anchors and chains. Took her line as we passed and placed her in safety inside. Anchored in Gaspé at 6.15 p.m.

19th, *Saturday*.—Refilled boilers and water tanks.

20th, *Sunday*.—Left Gaspé at 8.45 p.m. for Anticosti and Labrador.

21st, *Monday*.—Anchored and landed at West Point, Anticosti, at 8 a.m. Fishing poor; no herring. Rowed round to English Bay; poor fishing here; most of the boats have gone over to the north shore at Thunder River, where the fishing is good; they will return here when the fishing is over. Joined ship off here at 12.30 p.m., and continued to Long Point, where called at 5 p.m. Fishing good here and all the coast to the westward. Weather been rough all last week. On board at 5.30 p.m. and ran into Mingan, where anchored at 6.30 p.m. Since last visit, overseer Duguay had got worse; he has become blind and helpless and had to be sent home on the "Otter." Left word at Hudson Bay post to stop. Overseer Gaudin on his way up and get him to collect the bounty claims and the statistics for the Mingan subdivision. The Indians are all well and gone into the interior.

22nd, *Tuesday*.—Left at 5 a.m., for Esquimaux Point, where anchored and called at 7.30 a.m. Schooners all back, did badly, average about 100 cwt. of cod. Two of the vessels had 230 brls. of herring, the rest had none. They did not go on the French shore of Newfoundland as they were afraid of being compelled again to pay the duty; was sent for to visit a number of sick at the convent. Monseigneur Bossé; away, expected back by the "Alert"; on board at 8.30 a.m., and left for Natashquan, where anchored at 6 p.m. Fishing here is all over, and the schooners here left for their fall trip to Quebec. No herring this fall. Reported here that James Dredge the owner of the fishing station at Dog Island, in the Bonne Espérance subdivision, had been murdered. Saw Mr. Gaudin, and instructed him to land at Esquimaux Point on his way home, and go along shore to Sheldrake, collecting the bounty claims and statistics for the Mingan subdivision. He was to remain at Sheldrake, and I would call for him on my way back.

23rd, *Wednesday*.—Left at 5 a.m., for Eastward. Strong north-east wind, anchored in Caribou Harbour at 6.30 p.m. Ship not averaging now more than six knots.

24th, *Thursday*.—Left at 5 a.m., and stood down inside St. Mary's Islands; the boats were out fishing in deep water off Harrington and Mutton Bay; at 5.45 p.m. came to anchor in St. Angustin Bay, not able to make next harbour before dark. Ship to-day with canvas set to fair wind, and in smooth water has only made 7 knots; no vessels about the coast, or in the harbours passed to-day.

25th, *Friday*.—Fog all night, lifting at 7.45 a.m.; left for the eastward, strong south-west wind; stood down in the run and anchored at Bonne Espérance at 1.45 p.m. Mr. Whitely here yet, but most of the crew gone home. The fishery was good, there is still fish out in deep water. No truth in report that the man Dredge was murdered, he was drowned while visiting his nets. The Labrador cod-fishery is one of the best made for the last 30 years. Herring a failure everywhere, they kept off shore; the only place where they are known to have come in shore is at White Bay, on the east coast of Newfoundland. Thick fog all evening.

26th, *Saturday*.—At 2 a.m., wind veered to north-north-west, blowing a gale; had to let go a second anchor; 6 a.m., wind moderating, left for Long Point, off Long Point at 9 a.m.; no chance to land, continued round into Blancs Sablons. The cod-fishing has been good; on the Big room they have 10,000 cwt. and about 3,000 cwt. on Greenly Island; fish struck very abundantly during the first week of August, and then disappeared for good. On board at 3 p.m., and ran round to Bras-d'Or, where anchored at 4.30 p.m.; strong north-west wind; let go both anchors. Filled in the bounty claims for this



neighbourhood. Some of the families here are badly off; they had la grippe during the first of the fishing, but while Penny Bros. boats, since the 8th of August, have taken with the hook and line from 30 to 40 cwt., these people have not taken more than a couple of cwt. each. These families of Jones' who, a few years ago, were wealthy, and spending money extravagantly, are now so low that they have not even got boats to fish in; they own the best sedentary seal fishery on the coast, but have not the rigging requisite to fish it.

*27th, Sunday.*—At anchor in Bras-d'Or. Blowing fresh from south-west. Dull and cloudy.

*28th, Monday.*—Thick all night. At 6 a.m. sent boat over to Paroquet Island to remove the buildings put up for shelter by those who set shoal nets for seals in the spring, to the injury of the sedentary seal fishermen. I had, in the summer, notified the owners of these buildings to remove them before the 15th of September, or I would destroy them. Clearing. Left at 10 a.m. for Bonne Espérance, where anchored at 3.15 p.m. One very large iceberg off here. Received bounty claims for the coast from Middle Bay to Chicatica from Mr. Whitely. S.S. "Neptune" is in from St. John's, Nfld., for the balance of the crews here and at Salmon Bay. Mr. Whitely will remain on two weeks longer.

*29th, Tuesday.*—Rain and fog, with strong south-west wind. Held on here all day.

*30th, Wednesday.*—Same weather in a.m. Clearing at 12.45 p.m.; left for westward of Rocky Bay. At 3.10 p.m., blowing a gale, with heavy sea. Ship making no headway, put about and ran back under the Dog Islands, where anchored at 3.40 p.m.

*October 1st, Thursday.*—At 6 a.m. left for westward. Called at Chicatica at 9 a.m. All moving into winter quarters; no vessels about. Continued up the Rigolet to Big Meccatina, where called at 3 p.m. No vessels about. Gaumont reports good fishing in deep water, but the weather lately has been so rough that boats have seldom been out. Continued to Mutton Bay, where anchored at 4.30 p.m. People have done well; boats average from 50 to 60 cwt. They will continue fishing till the ice makes. Had here a number of applications for cod trap licenses. Now that the fees are lowered, they all intend to turn their seines into traps. Advised them to club together, so that a few trap net licenses could be divided among them, as they cannot all expect to get licenses.

*2nd, Friday.*—Left at 5.20 a.m.; rain and east wind. 9 a.m., called at Harrington. People to-day are moving into winter quarters up the rivers. They have not done as well here as at Mutton Bay, as they all missed the best run of fish. The boats average about 40 cwt. Here, as at Mutton Bay, they all want cod trap licenses. Gave them the same advice. A few herring were taken here. Left at 10 a.m. Passed Cape Whittle at 3 p.m. Strong south wind, with rain; distance run for Natashquan. At 11.40 p.m. wind south-east, with rain and fog. Sea making, headed ship off shore and laid-to for daylight.

*3rd, Saturday.*—At 3 a.m. half a gale, and dirty weather. No hope of making Natashquan or landing at Anticosti, put the ship before it and ran for Esquimaux Point. At 9 a.m. made Hunting Island and stood in for the land. Anchored in Esquimaux Point harbour at 1.30 p.m. Vessels not yet left for Quebec. Cod fishing carried on in boats from here has been good since the 1st of August. This has saved this people, and they will not require any outside aid, though they are preparing to demand it. Everywhere else on the coast, the people, in spite of the loss caused by sickness, are well off; yet here they are badly off. The fact is that their summer voyage to Labrador after cod is a farce. They cruise over the whole coast, and come back here with an average of 100 cwt. per vessel, while all the other vessels, mostly strangers on the coast, have made good voyages; and at Natashquan, boats fished by a man and a boy in less than one month average over 120 cwt. In the face of these facts, these people deserve no sympathy. Overseer Gaudin has been here and has gone on to the west. On board at 3 p.m. and left for Mingan, where



anchored at 6 p.m. We intend on Monday to put the ship ashore and try to clean her bottom, which has become very foul.

4th, *Sunday*.—At anchor in Mingan; examined beach to find a smooth spot to anchor the ship, and drove down pickets to make her fast to.

5th, *Monday*.—Ready at 2 a.m.; high water to beach the ship, but it is blowing a gale from the east, with heavy swell running in the harbour; not safe to beach the ship; at 6 a.m. set hands to work to scrape the bottom as far down as we could reach, having careened the ship as far as we could. We find if we scrape too hard all the paint comes off. The red lead, which we put on the bottom this spring, has not stood, and it will not do to put it on again, we must use patent metallic paint, such as is used on most iron vessels. Blowing a gale all day with fog and rain. For the past week we have kept the crew engaged scraping and hammering the inside of the forehold to get off the rust; to-day began painting it. We found the escape pipe of the galley sink broken off just at the outlet through the hull; the engineers repaired it. We will hammer and paint as much of the inside of the ship as we can before returning to Quebec; wired Gaudin at Sheldrake that I would call for him to-morrow.

6th, *Tuesday*.—Same weather up to noon, when it leared and wind changed to west; left at 12.40 p.m. for Sheldrake; outside Paroquet, the wind hauled to west-north-west and began to blow off Magpie; at 3 p.m., blowing a gale with a heavy sea; no hope of landing at Sheldrake; kept ship away under canvas and steam; rounded West Point, Anticosti, at 6.45 p.m. Fame Point abeam at 11.40 p.m.; ship making bad weather owing to her being very light.

7th, *Wednesday*.—Rounded Cape Gaspé at 3.20 a.m., and ran into Gaspé, where anchored at 6 a.m. Wired Captain Gordon. Finished painting inside of forehold; gave the ship a list and painted bottom as far down as we could; storm drum up.

8th, *Thursday*.—Gale of north-east with rain and sleet.

9th, *Friday*.—Weather moderating; steamed to Lowndes wharf and took on board a load of telegraph poles for the Magdalen Islands.

10th, *Saturday*.—Left Gaspé for the Magdalen Islands at 6 a.m.; met D. S. "Alert" going into Gaspé; called at Malbay at 10 a.m.; cod fishing poor; smelt coming in; squid abundant. Continued at 11.30 a.m. for Magdalen Islands; wind west-south-west; at 4 p.m., strong north-east wind.

11th, *Sunday*.—Made the Deadman at 2 a.m.; stood round the West Point and Entry Island; anchored under the land of All Right Island, at 8 a.m.; half a gale from north-north-east; no chance to land poles to-day. Island vessels will leave in a few days for Halifax with fish and oil, and to bring back winter supplies, no foreign vessels about; fishing over.

12th, *Monday*.—Blew hard all night; moderated at 9 a.m.; stood over under Grindstone Island and anchored; made two rafts of the telegraph poles and kedged them ashore in Leslie's Cove, at Cap aux Meules; all ashore at 12.15 p.m., and placed in care of Mr. LeBourdais, superintendent of telegraph line; left at once for Pictou to coal; East Point of Prince Edward Island abeam at 8 p.m.

13th, *Tuesday*.—Anchored in Pictou at 4.20 a.m.; at 8 a.m. reported on board D. S. "Acadia," and received orders from Captain Gordon to cruise around Cape Breton and off the East Point of Prince Edward Island; steamed down to Acadia mine-dump and took on 56 tons of coal.

14th, *Wednesday*.—Finished coaling, took in 178½ tons; hauled out into stream; washed down; half a gale; south-east wind with fog and rain; storm drum up; held on here.

15th, *Thursday*.—Weather clearing; left Pictou at 5.45 a.m.; stood down for Cheticamp; at 8 a.m. came on fresh from north-west; stood over for the land under East Point, P.E.I.; wind and sea increasing, ran into Georgetown and anchored at noon. Schooner in from Cheticamp reports all the United States mackerelers left that part of coast. Weather moderating at 2.15 p.m., left Georgetown and ran down to East Point, where anchored under the land at 6 p.m. No vessels about. Wind south-west with rain.

16th, *Friday*.—At 2.15 a.m. left for Cheticamp; made the island at 7 a.m. Fog, rain and south-east at 8 a.m. anchored under the land south of Cheticamp Island, landed and called on Messrs. Robin's room. No United States vessels about; those that have been have left on Tuesday last to go round North Cape. On board at 10 a.m., wind coming from the west at 11 a.m.; left for Aspy Bay at 12.30 p.m. Come on thick with fresh north-east, put about to go round through the Gut, as most likely will have north-west wind when this clears up. Wolf Island abeam at 2.15 p.m. Henry Island at 5.15 p.m. Stood around Smith Island and up into Port Hood where anchored at 7 p.m. Had it dirty all day; wind from all quarters, with squalls, heavy rain and thunder.

17th, *Saturday*.—Fresh gale of north-east all day with rain and fog.

18th, *Sunday*.—Gale over; light south-east with fog all a.m., clearing at noon; wind south. Left at 1 p.m. for Port Hawkesbury, where anchored at 4.30 p.m. No fishermen about.

19th, *Monday*.—Up anchor at 5.40 a.m. and stood down the gut. Light south-south-east; off the Cerberus Rock at 8.30 a.m. Wind hauling to east and freshening; sea making; appearance of bad weather; ship making no headway. No hope of reaching Louisburg before dark; put about and ran into Arichat, where anchored at 9.30 a.m. Freshening to an easterly gale, with rain and fog. At 4 p.m. blowing heavy gale, had to let go second anchor to steady the ship. At 10 p.m. had to keep engine at stand by for fear chains would part in the squalls.

20th, *Tuesday*.—Gale moderated at 2 a.m.; got up anchors, and at 6 a.m. left for Louisburg. At 11 a.m. off Red Cape. Heavy head sea; wind freshening from the east; ship making no headway. Again no chance of making Louisburg. Gave it up and put back through the Gut. Rounded Smith Island at 6.50 p.m. and stood up under the land for Cape St. Lawrence. Wind east with heavy squalls off the land.

21st, *Wednesday*.—At 2 a.m. off Grande Anse. Met heavy sea from the north-east, blowing a gale. At 2.30 a.m. blowing a hurricane. Ship making no headway whatever, will not even keep head to the wind. Long boat got adrift and carried away the spar. Secured the boat and got extra lashings on the others; everything awash; edged the ship away and tried to get under the land; 4.20 a.m. made Cheticamp Light; 8 a.m. close under Wolf Island. Not blowing quite so hard and less sea. Kept close under the land until 11 a.m., when put ship before it and kept away for Georgetown, where anchored at 5 p.m.

22nd, *Thursday*.—Got new spar for long boat. Cloudy with showers; wind veering to north-west. Left Georgetown at 11.45 a.m. East Point abeam at 4 p.m. Shaped course for Cape St. Lawrence.

23rd, *Friday*.—Cape St. Lawrence abeam at 12.10 a.m. Clear; heavy easterly swell. Rounded Cape North and stood along the land. At daylight saw several schooners off Ingonish. No vessels about Cape North or Aspy Bay. Passed close to "Norumbega," "Governor Butler," and "Lizzie M. Center," all under weigh well off shore. Stood into Ingonish, anchored, and landed at 8.30 a.m. Called at the Custom House. All kinds of fishing poor; neither boats nor schooners been able to do anything with the recent weather. A schooner over from Newfoundland reports a large school of mackerel about 25 miles off to the south-east; believed to be the bay mackerel passing out. A fleet of six United States schooners about here. Cod is abundant, but bait scarce. On board at 10 a.m. and left for Sydney. Light east wind. At 11 a.m. came on thick with rain and fresh east wind. 1.30 p.m. made Low Point and ran into Old Sydney and anchored at 3 p.m. Storm drum up; half a gale from the east. Received orders here from Captain Gordon to remain about here till the 28th and on the 31st to meet Professor Carpmael by the steamer "Admiral" at Gaspé and take him to Anticosti and back.



24th, Saturday.—Heavy rain; wind south-west; at 7.30 a.m. left for North Sydney, where anchored at 8.20 a.m.; at 9.10 a.m. left to board fishermen in harbour.

Name.	Port.	Tons.	Crew.	How Fishing.	Remarks.
Nereid .....	Gloucester, U.S. ....	92	18	Cod banker. ....	600 cwt.
Mascot. ....	do .....	77	14	do .....	Done fairly.
Ethel M. Jacobs .....	do .....	125	17	Mackerel seiner.	18 brls.
John S. Preston. ....	do .....	88	14	Cod banker. ....	
Nonumbega. ....	do .....	120	17	Mackerel seiner.	40 brls.; 800 per season.
Yosemite. ....	do .....	115	17	do ..	18 do
Hattie M. Graham. ....	do .....	133	17	do ..	20 do
Lizzie M. Carter. ....	do .....	77	17	do ..	18 do

These vessels all ran in yesterday evening; the "Laurel" and "Governor Butler" ran into Ingonish. On board at noon. The seiners do not expect to remain long on the coast; they all report weather too rough to do anything. The "Governor Butler" ran through her seine on Thursday and burst it. At 2 p.m. blowing half a gale from west-south-west; had to let go a second anchor. The seiners all believe that the large fat bay mackerel is off shore between Cape North and Flint Island, and working south.

25th, Sunday.—Same weather continues; clearing towards evening; wind hauling to west-north-west, with snow squalls.

26th, Monday.—Fleet left harbour at 6 a.m. and stood off shore. At 9.30 a.m. we got in anchor and stood out. Mackerel fleet are spread out about 15 miles off shore. North and north-east wind from Low Point. We stood to the eastward around Flint Island and down in direction of Scatterie; no fishing vessels in this direction. At 2 p.m. put about and ran back to Old Sydney, where anchored at 6 p.m.; fresh south-east wind, rain and fog.

27th, Tuesday.—Same weather; at 9 a.m. ran out and anchored; at 10 a.m. under the light on the Spit; rain and fog all day; south-south-east wind.

28th, Wednesday.—Left at daylight, 5.45 a.m., for Paspebiac; at 6.45 a.m. came on fresh north and north-east wind, with rain and sleet; 11 a.m. off Ingonish. Making no headway in the head sea, put about and ran back to North Sydney, where anchored at 3.30 p.m. The mackerel fleet are all at anchor in Ingonish behind the bar.

29th, Thursday.—Blowing a gale from north-north-east; all vessels that went out ran in again, and report very heavy sea outside. The mackerel fleet all came in from Ingonish to-day; had it heavy crossing. "Lizzie M. Carter" carried away her flying jibboom outside the harbour; boarded—

Name.	Port.	Tons.	Crew.	How Fishing.	Remarks.
Laurel. ....	Gloucester, U.S. ....	119	17	Mackerel seiner.	2 months out; 90 brls.
Governor Butler. ....	do .....	87	16	do ..	3 weeks out; 25 brls.

None of them done anything since last in here. They report mackerel 20 miles off shore moving east. Not one day for a week back when it would have been possible to haul a seine. Snow at intervals during the day.

30th, Friday.—Left for Gaspé at 5.45 a.m. Strong west wind. Left the fleet in harbour. Passed Cape North 12.15 p.m. No boats out. Strong west wind and head sea to Bird Rock, which abeam at 10.30 p.m.



31st, *Saturday*.—2 a.m. east wind and snow. Snow all day with strong breeze. Made Bonaventure Island at 2 p.m., and ran into Gaspé and anchored at 6 p.m. An easterly gale.

*November 1st, Sunday*.—Steamer "Admiral" only arrived this p.m., having laid over in Port Daniel Bay yesterday. Met Professor Carpmael.

*2nd, Monday*.—At anchor in Gaspé Basin awaiting further orders. Heavy north-west gale; freezing hard, 18° above zero. Orders to wait for steamer "Admiral" next trip.

*3rd, Tuesday*.—Same weather. Basin frozen over.

*4th, Wednesday*.—Weather moderate.

*5th, Thursday*.—Steamer "Admiral" arrived at 1 a.m. Met Mr. Trudel of the Customs; took him on board and left at 1.45 a.m. for South West Point, Anticosti. Anchored at South-West Point at 9.45 a.m.; landed Mr. Carpmael and one tide gauge. Left at 11 a.m. for West Point and English Bay to take off wrecked passengers and crew of "Gleaner." Rounded West Point at 5 p.m. Anchored in 11 fathoms off English Bay at 6.15 p.m. Got people and baggage on board and left at 8.5 p.m. to return to South West Point.

*6th, Friday*.—Anchored at South West Point at 3.30 a.m. At 5 a.m. sent boat ashore after Professor Carpmael, and at 6 a.m. left for the south shore. Landed the 25 wrecked people on Bonaventure Island at 2 p.m. At 2.15 p.m. left for Gaspé where anchored at 6.10 p.m. Landed Professor Carpmael. Basin frozen over. Thermometer 9° above zero F. Left at 8.30 p.m. for river and north shore on Customs service.

*7th, Saturday*.—Cape Magdalen abeam at 9.10 a.m. Stood over for Cawees at 5.30 p.m. Dark, not able to make the Cawees, changed course for Egg Island. Anchored inside Egg Island light at 8.45 p.m., with fine weather and smooth water in here. Since leaving Gaspé only made 6 knots by the log. Saw no vessel in the river to-day.

*8th, Sunday*.—Left Egg Island at 4 a.m. and ran down to Cawees at daylight, 6.15 a.m. Stood in behind the Cawees. No vessel about. Came out again and left for St. Nicholas. Point des Monts abeam at 11 a.m. At 12.45 p.m. abreast of St. Nicholas. Saw a small vessel inside; stopped ship and went on board with Mr. Trudel. Schooner is "Java," Luc Cormier, bound down from Quebec to Esquimaux Point with passengers and provisions. He reports two strange schooners passed up outside yesterday. On board again at 2 p.m.; continued up to St. Pancreas. Looked in at 3 p.m., no vessel there. Stood around the Manicouagan shoals. Lightship abeam at 5.10 p.m. Steered for Bic. Strong south-east all day. Bic light abeam at 10.50 p.m. Snow showers.

*9th, Monday*.—Green Island light abeam at 3.45 a.m. Ran up for St. Denis and over to Goose Cape on north shore at 10 a.m. Anchored between Isle au Coudre and Les Eboulements. Landed Mr. Trudel at Les Eboulements. On board again at noon and ran up to Baie St. Paul, where anchored at 1 p.m. No sign of any vessels about.

*10th, Tuesday*.—Left at daylight and stood down; at 9 a.m. sighted a schooner bound up off St. Denis, overhauled her, she proved to be the trading schooner "Stadacona,"—Captain N. Blais—inwards from Blancs Sablons; continued down; at 1.30 p.m. anchored below the Brandy Pots, so as to see over both channels; at 3 p.m., saw D. S. "Druid" coming up past Green Island; got in anchor and ran over to River du Loup to speak her; anchored off the wharf at 4.30 p.m.; called on board "Druid"; Captain Demers has been down to Bic; is from there this morning, saw no vessels below except the "Maria,"—Captain Ed. Joncas—trader from Labrador, bound in; at 9 p.m. saw a schooner coming to, outside, rowed out with Mr. Trudel to her, she is the freighter "Cardigan" bound out. Steamer "Saguenay" came in from Quebec, she reports the tug "Dauntless" also out on Custom service; she towed up to Quebec, under seizure, on Monday, the schooner "Marie Vigilante," seized off Goose Cape. This was one of the vessels we were looking for.

11th, *Wednesday*.—Left at daylight, 5.45 a.m. and up inside Isle au Coudre to Baie St. Paul, where anchored at noon; on the way up met the "Dauntless" running down. Mr. Trudel went ashore here and seized a small lot of contraband. At 12.30 p.m. left again for below; at 5.30 p.m. met "Druid" off the Pilgrims going up with gas buoys in tow. Captain Demers hailed us that a schooner was beating up to the north of Hare Island. Kept on down south of Brandy Pots, sighted two schooners, boarded them, one is the "Maria"—Captain Joncas—bound in with fish, oil and passengers from Labrador; the other, another vessel we were looking for, the "Willie"—Captain Blouin; this vessel had been to St. Peter's, but on searching her Mr. Trudel, found nothing on board but a few barrels of oysters. Stood in to west of Brandy Pots and anchored at 6.30 p.m.; south-east wind with rain and sleet; "Dauntless" anchored in company; at 11 p.m. wind veered to south-west, had to change our anchorage to east side of the Pot; "Dauntless" did the same.

12th, *Thursday*.—Thick all night; at 6 a.m. wind west; left for below, "Dauntless" following suit; below Red Island lightship sighted a small schooner standing for the north shore; stood after her, the "Dauntless" steaming two miles for our one, got to her before we did, on boarding her we found her to be a small craft from the south shore bound over to a lumbering station on the north shore, with oats and beef. Stood on and ran alongside the Red Island lightship; he reports a large loaded schooner passed up yesterday along the north shore; this is the same vessel reported to us by the "Druid." Sighted the Manicouagan lightship beating up away below, ran down to her, "Dauntless" following. Captain LeBlanc reports seeing two schooners, one, the large loaded schooner passed up along the north shore yesterday, the other a small schooner now just coming into sight away in direction of Bic. "Dauntless" making for her (she proved to be the "Marie Rose" with a full load of contraband); as we could not reach her before the "Dauntless" we decided to return and follow up the one reported as passing up by the north. Ran up to north of Red Island, White Island and Hare Island; here met a schooner bound down who reports three schooners off Kamouraska, beating up, these must be the two we boarded last night and the one we are looking for. At 7.15 p.m. spoke the Lower Traverse lightship; he reports no schooner inwards to-day. Stormy south-west with snow and sleet. Ran up to Crane Island where anchored at midnight. The schooners which must be below us are likely to come here to anchor with the rising tide, and nothing can pass without being seen.

13th, *Friday*.—At daylight saw our three schooners anchored below us; ran down to them; the first two and the "Maria" and "Willie" before boarded, the other a loaded schooner with three jibs is the "P. Savard," Captain Savard, inwards from Cow Bay for Montreal with coal. Decided here as we were near Quebec and out of oil and provisions, to run up to town and get supplies; anchored off the Queen's wharf at 1.30 p.m. Took in stores requisites for another week and left at 4 p.m. for below.

14th, *Saturday*.—Snowing. Anchored off St. Denis at 2 a.m. Clearing up at 6 a.m., with strong west wind, continued on down. 12.30 p.m. passed the Brandy Pots. "Dauntless" anchored to eastward. After we had passed, the "Dauntless" got under weigh and followed us. Ranging alongside, Mr. Robitaille, the Customs officer on board, hailed and said he wanted to speak to me. He said he knew where the "Marie Rose" was. He had been alongside, but her crew would not allow him on board, and that he wanted help to board and seize her. I told Mr. Robitaille that I was cruising under the orders of Mr. Trudel; but as it was our object to seize smugglers, if he would show me the "Marie Rose" I would see that he was protected when he seized her. He replied that was all he wanted. He returned on board the "Dauntless," which then cast off from us and steamed ahead down the river, going slow to wait for us. A little below White Island the "Dauntless" headed for the north shore. We did not follow her, as we were not far enough below to clear White Island reef. Just then we sighted a schooner beating up off the west end of Green Island. It was then blowing a strong nor'-wester. We headed for the schooner, and the "Dauntless" changed her course and made for her



also, hoisting a flag as she did so, and going ahead full speed, leaving us a long way behind. The schooner, seeing both steamers coming down in her direction, lowered her mainsail, wore, and stood inshore under her foresail and jib, running in between Green Island and the main. We stood on, going as far inshore after her as we dared, and met the "Dauntless" coming back. It was blowing by this time too hard, and there was too much swell on to send the boats out. We put about and stood out, the "Dauntless" going in the direction of Rivière du Loup. We stood over in the direction of Red Island, with the view of anchoring under Red Island for shelter, as well as to see whether the schooner, which we believed to be the "Marie Rose," had passed on down right behind Green Island or not. Seeing no sign of her going through, we concluded that she had anchored under Green Island, where she would ground when the tide fell. It was high water when she went in. Stood down for some distance. No sign of the schooner. Wind and sea increasing, we put about and ran up under White Island, with the intention of holding on until the breeze went down. Anchored at 3.30 p.m. Freezing hard; ice making wherever the spray falls. The "Dauntless," after some time, came out from Rivière du Loup and anchored under the Brandy Pot. At 7.30 p.m., calming off, got under weigh and stood in between the western reef of Green Island and the main land of Cacouna into  $5\frac{1}{2}$  fathoms, where anchored at 8.45 p.m. Sent the whaler, with the first officer and Mr. Trudel, down in behind Green Island to look for the schooner.

15th, *Sunday*.—Boat returned at 1.30 a.m. Saw no sign of any schooner. Held on till daylight, 6 a.m., when left for Red Island lightship, to make further enquiries. At 8 a.m. noticed that the lightship had left the station. Stood back over towards Trois Pistoles, and anchored below Basque Island, and sent boat in with Mr. Trudel to board a schooner seen in behind Basque Island. She proved to be a Sandy Bay schooner, bound up with fish, &c. The people on this schooner report that they saw three schooners, one large and two small, run out from behind Green Island, last evening, and stand away to the north. Left at 9.35 a.m. for Isle au Coudre by the north channel. Strong north wind; freezing hard. Called at Basque Harbour and Black River, where saw two schooners. They are local coasting craft landing supplies. Anchored off Bay St. Paul at 10.30 p.m. Sent boat ashore; found that the schooner "Busy," on Thursday night last had run in under Isle au Coudre and landed her cargo. On board again at 11.30 p.m. and left to stand down along the north shore.

16th, *Monday*.—At 4 a.m. wind changed to east; at 8.10 a.m. strong south-east, with thick snow-storm; then off Bon Désir, on the north shore. Put about; no use going further below in face of this weather. Stood over for south shore to make Green Island fog gun. Made the gun and ran up for Rivière du Loup. Weather clearing, anchored off Rivière du Loup at 12.30 p.m. Boarded here two small schooners at anchor. They belong to Escoumains, and are bound down with provisions and coal. At 3 p.m. got in anchor and ran out under the east side of the Brandy Pot, where anchored abreast of the lower end of Hare Island at 4 p.m. At 7 p.m., east wind, rain and sleet.

17th, *Tuesday*.—Weather milder; north-east wind with fog and rain; decided to run up and remain near Isle au Coudre, in case "Marie Rose" might try to run in during the thick weather; crossed to River du Loup at 10 a.m.; called to enquire at telegraph office if any news for us, nothing here; left at 10.30 a.m.; above Hare Island bank spoke Red Island lightship beating up; he reports no vessel passed in lately; has not seen the "Dauntless"; crossed to north shore and at 2.30 p.m. anchored under Point Hen, below Murray Bay; sent boat ashore; boat returned at 4.30 p.m. bringing word that "Dauntless" was seen going up yesterday with a schooner in tow; on receipt of this information, decided, under Mr. Trudel's order, to return to Quebec; 4.45 p.m., got under weigh for Quebec; at 5 p.m. blowing a gale with squalls and rain; ship making no headway; had to keep her away across the sea and the wind for St. Denis; tide falling; anchored below St. Denis at 8 p.m., in 9 fathoms with 60 fathoms of chain; at 10 p.m. ship drifting; let go the second anchor.



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18th, *Wednesday*.—At 1.15 a.m. both anchors up, left for Quebec; freezing hard; 9.30 a.m. met “Alert” and “Druid” bound down; made fast to Queen’s wharf at noon; landed Mr. Trudel.

19th, *Thursday*.—Received orders to return to my own work, and to send “La Canadienne,” with Captain Belanger, down river again on further service for Customs; “La Canadienne” left for below, at 8 p.m., with Messrs. Cameron and Trudel and a number of special constables.

20th, *Friday*.—“La Canadienne” anchored under Isle au Coudre; at 4 a.m. landed Custom officers and their men; took them on board again at 1.40 p.m., and left to return to Quebec; made fast to Queen’s wharf at 9 a.m.; landed Custom officers and men.

“La Canadienne” remained alongside the Queen’s wharf until the 25th, when she went into winter quarters in the Louise Basin.

WM. WAKEHAM,  
Commander.

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SUPPLEMENT No. 1 TO THE ANNUAL REPORT

OF THE

DEPARTMENT OF FISHERIES

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FISHERIES STATEMENTS

AND

INSPECTORS' REPORTS

For the Year

1891

PRINTED BY ORDER OF PARLIAMENT.



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TO THE

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1891.

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## PART II.

FISH-BREEDING OPERATIONS.—Report of Mr. S. Wilmot, Superintendent of Fish Culture.  
(Separately Indexed.)

## REPORT

ON THE

## FISHERIES OF THE DOMINION OF CANADA

For the Year 1891.

To the Honourable

CHARLES H. TUPPER,

Minister of Marine and Fisheries.

SIR,—The total yield of the fisheries of the Dominion of Canada for the year 1891 represents a value of \$18,977,878.05, as follows:—

Nova Scotia.....	\$ 7,011,300 53
New Brunswick.....	3,571,050 70
Quebec. ....	2,008,378 74
Prince Edward Island.....	1,238,733 81
British Columbia.....	3,008,755 30
Ontario.....	1,806,389 68
Manitoba and North-West Territories ..	332,969 29
	<hr/>
	\$18,977,878 05

Showing an increase of a million and a quarter dollars over last year.

This is exclusive of the quantity consumed by the Indian population of British Columbia, Manitoba and the North-west Territories, of which no accurate data are at hand, but which, it is believed, would increase this total value to fully \$23,000,000.

With the exception of the Province of Ontario, where a decrease of some \$200,000 is noticeable, principally due to unfavourable weather in the great lakes, it will be found on examination that all the other provinces show an increase.



## DETAILS.

The following table shows the value of the principal kinds of commercial fishes exceeding \$100,000, as well as the increase and decrease in value :—

Kinds of Fish.	Amount.	Increase compared with 1890.	Decrease compared with 1890.
	\$	\$	\$
Cod .....	3,827,708	394,128	
Herring .....	2,294,914	336,422	
Salmon .....	2,256,248		780,321
Lobsters .....	2,252,421	604,077	
Mackerel .....	1,969,571	444,595	
Seal skins .....	826,083	309,127	
Whitefish .....	791,185	23,528	
Trout .....	661,343	36,057	
Haddock .....	525,595	6,473	
Fish oils .....	358,668	43,634	
Hake .....	315,555		61,885
Smelts .....	277,035		6,408
Pollock .....	243,744		29,804
Halibut .....	215,469	94,797	
Alewives .....	194,029	1,577	
Sardines .....	192,936	77,184	
Oysters .....	183,846	12,068	
Pickarel .....	134,130		39,290

## NOVA SCOTIA.

The yield of the fisheries in this province shows an increase of \$374,855.89, principally in mackerel, halibut and shad.

In division No. 1, which comprises the Island of Cape Breton, the statistics show a large decrease of nearly half a million, mostly attributable to a decline in the prosecution of the fishing industry in Richmond county, where people found more profitable employment elsewhere, and to comparative failure in the cod fishery, owing to bositerous weather and scarcity of bait.

In the centre division the catch was good, and above the average of the past fifteen years.

In the western division an increase of over \$600,000 is recorded. Salmon fishing was good, and the same may be said of herring and alewives. Mackerel fishing shows an increase of 50 per cent. Lobster fishing was a great success, the yield in live and canned lobsters showing an increased value of \$66,000. Unfortunately, cod shows a large falling off.

The importance of preserving fresh bait in ice is strongly urged, and the system is daily finding favour among the fishermen, who begin to realize its advantages.

## NEW BRUNSWICK.

The returns for the above province show the gratifying increase of \$871,995.65, due to a general increase in the cod, mackerel, halibut, smelts, sardines and lobster fisheries.

In the western division, which comprises the county of Charlotte, the year was one of general prosperity for the district. The yield of the fisheries shows an increase of over \$200,000. The lobster fishery was excellent, and prices were good. The sardine and herring fishery gave excellent returns, the fish being more abundant than for the two past years. The fishery laws and regulations are better observed than ever, since the fishermen find it to their immediate advantage to strictly comply with them. Thanks to careful watching by United States and Canadian authorities, salmon are said to be on the increase in the St. Croix River.

In division No. 2, which comprises the north-eastern part of New Brunswick, the yield of the fisheries shows an increase of 40 per cent. Shad, salmon, herring, smelts, cod, halibut, mackerel and lobster fishing yielded remunerative returns. A noticeable feature was the reappearance of mackerel in large numbers.

In division No. 3, comprising the central and north-western counties of New Brunswick, although the fisheries have not the great commercial value of the other two divisions, they are of the utmost importance to the residents, as affording an ample supply of delicious fish food for home consumption. The fish caught in this division consist chiefly in salmon, bass, shad, herring and lobsters. All these fisheries are in a healthy condition, with the exception of the bass fishery, which continues to show signs of decrease.

#### QUEBEC.

While the returns for 1890 showed a decrease of \$261,074 in the yield of the fisheries of the above province, as compared with 1889, this year's statistics show a gratifying increase of nearly \$400,000.

In the Gulf of St. Lawrence division the catch of fish was the best experienced for the past eight years. Fishing operations in most localities were continued until the very end of December. While the increase is almost general in all kinds of fish, it is most noticeable in cod, which exceeds last year's yield by nearly 150,000 hundred weight. Lobsters also show an increase of 300,000 cans, which would have been still larger had it not been for the *grippe*, which happened to strike in just at the height of the fishing. Salmon fishing was very good on the upper north shore. On the south coast the water got low too early in the season, and the fish did not enter the rivers until after the heavy rains of the fall. Seal fishing was a failure. The practice of freezing herring for bait is gaining ground. This bait has been found to answer admirably, and will keep fresh for twenty-four hours under the thwarts of fishing boats. A larger number of vessels from Newfoundland than usual visited the coast of Labrador. Prices ruled high, although foreign markets were low.

The inland fisheries of the Province of Quebec show a decline of over \$40,000, principally felt in the upper St. Lawrence and Ottawa divisions. The south shore division, between Cape Chatte and Lévis, shows an increase of \$23,750, chiefly due to a large herring catch, while the north shore experienced a deficit of 20 per cent. Shad and eels proved great failures.

#### PRINCE EDWARD ISLAND.

The value of the fisheries in this province shows an increase of nearly \$200,000, wholly due to the lobster fishery. Cod shows a falling off; mackerel and oysters a slight increase.

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BRITISH COLUMBIA.

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Although the total value of the fisheries of the above province shows an increase of \$472,677, the salmon yield exhibits a heavy decline of nearly five million cans as compared with 1890, due to a lighter pack, and to a falling off in prices on English markets. Four new canneries were put upon the Fraser, and twenty-two vessels were added to the sealing fleet. The total capital invested in the several branches of fishing is estimated at \$1,679,520.

## ONTARIO.

A decline of over \$200,000 will be noticed in the value of the fisheries of the above province. This result is more apparent than real, as the reduction of 1 cent per pound on schedule prices of herring shows a deficit of nearly \$100,000 in value, while the quantity is about the same as last year. There is, however, a falling off of over a \$100,000 in Lakes Huron and Erie fisheries, ascribed to the unprecedented gales experienced there during the latter part of the fishing season, causing great destruction to fishing gear.

## MANITOBA AND THE NORTH-WEST TERRITORIES.

The statistics for this year show a very gratifying increase of over \$100,000.

Inspector McQueen, who has charge of the Province of Manitoba, reports that fish of all kinds were abundant, and that no depletion was experienced. On Lake Winnipeg large quantities of whitefish were taken. Commercial fishing, under the new regulations, and within the curtailed limits, proved highly remunerative. There were four companies operating on Lake Winnipeg, and the value of the fish which they caught is estimated at \$130,038. Five steam tugs, 26 sailing boats, and about 500 smaller boats and canoes, were used for fishing purposes in the waters of Manitoba. The total value of fish caught is estimated at \$246,184.

Inspector Gilchrist states that he finds it very difficult to give a relatively correct estimate of the value of fish caught in the Territories, owing to the vast extent and comparatively unsettled state of the country. He, however, puts down the yield of all kinds of fish caught at \$86,785. The service of protecting the fisheries in these wild regions is being gradually organized, and will, in a few years, it is confidently expected, be put on an efficient basis.



## GENERAL RECAPITULATION

OF the Yield and Value of the Fisheries in the Dominion of Canada, for the  
Years 1890 and 1891.

Kinds of Fish.	1890.		1891.	
	Quantity.	Value.	Quantity.	Value.
		\$ cts.		\$ cts.
Cod..... Cwt.	857,734	3,433,580 00	849,838	3,827,708 00
Herring, pickled..... Brls.	274,274	1,097,096 00	298,598	1,343,693 00
do smoked..... Boxes.	1,354,161	340,290 25	2,386,920	596,732 25
do frozed, fresh..... Lbs.	15,621,786	521,106 10	9,108,650	354,489 00
Lobsters, preserved, in cans..... "	11,559,984	1,387,198 60	14,286,157	1,999,921 04
do in shell, alive, &c..... Tons.	6,748	261,146 00	6,312½	252,500 00
Salmon, pickled..... Brls.	5,140½	70,652 00	2,557	35,500 00
do fresh..... Lbs.	3,686,998	563,533 10	4,404,311	671,746 10
do preserved, in cans..... "	19,910,304	2,389,666 44	15,206,328	1,522,508 80
do smoked..... "	63,592	12,718 00	132,472	26,494 40
Mackerel, preserved, in cans..... "	283,474	35,032 92	165,981	19,917 76
do fresh..... "	770,090	46,254 00		
do pickled..... Brls.	96,246	1,443,690 00	139,261	1,949,654 00
Haddock..... Cwt.	133,017	532,068 00	150,170	525,595 00
Hake..... "	94,335	377,440 00	124,385	315,555 00
Pollock..... "	68,387	273,548 00	81,248	243,744 00
Trout..... Lbs.	5,829,466	584,166 60	6,287,643	628,763 80
do pickled..... Brls.	4,112	41,120 00	3,258	32,580 00
Whitefish..... Lbs.	11,176,582	767,657 90	11,763,841	791,185 40
Smelts..... "	4,735,517	283,443 57	5,552,101	277,035 75
Sardines..... Hhds.		115,752 00		192,936 50
Oysters..... Brls.	56,676	171,778 00	61,032	183,846 00
Hake sounds..... Lbs.	67,554	62,624 00	86,075	64,554 75
Cod tongues and sounds..... Brls.	1,606	16,060 00	1,278	11,443 00
Alewives..... "	42,766	192,452 00	43,117	194,029 50
Shad, fresh..... Lbs.	108,103	6,486 18		
do pickled..... Brls.	6,728	66,524 00	8,428	84,286 46
Eels, pickled..... "	7,389	73,890 00	4,284	42,840 00
do fresh..... Lbs.	1,425,051	85,503 06	842,696	50,561 76
Halibut..... "	1,525,130	120,672 80	2,719,697	215,469 00
Sturgeon..... "	2,047,170	116,991 90	1,525,246	87,789 56
Maskinongé..... "	769,846	46,190 76	743,030	44,581 80
Bass..... "	977,470	58,648 70	799,324	47,959 44
Pickarel..... "	3,142,189	173,420 13	2,990,679	134,130 07
Pike..... "	1,691,702	62,262 64	1,811,357	62,831 98
Winninish..... "	100,000	6,000 00	100,000	6,000 00
Tom cod or frost fish..... "		34,244 88		21,767 50
Flounders..... "	79,000	7,900 00	126,575	6,328 75
Squid..... Brls.	13,138	52,452 00	8,348	33,392 00
Ooláchans..... Lbs.	114,600	7,780 00	281,700	12,505 00
Clams..... "		16,180 00		16,024 20
Fur seal skins in British Columbia..... No.	44,751	492,261 00	52,995	794,925 00
Hair do..... "	27,245	24,695 00	25,962	31,158 75
Sea otter skins..... "	102	10,200 00		
Porpoise skins..... "	549	2,271 00	301	1,204 00
Fish oils..... Galls.	727,020	315,034 00	834,347	358,668 20
Coarse and mixed fish..... Brls.	40,278	187,942 05	39,113	171,076 03
Mixed fish, British Columbia..... "		46,911 25		46,419 00
Fish used as bait..... Brls.	165,590	248,986 00	178,731	212,735 50
do manure..... "	122,484	61,242 00	198,386	99,194 00
Guano..... Tons.	602	17,080 00	770	19,250 00
Crabs..... No.	504,800	25,240 00		30,200 00
Home consumption not included in return.....		327,809 50		284,647 00
Total.....		17,714,902 33		18,977,878 05

## RECAPITULATION.

Provinces.	Value.		Decrease.	Increase.
	1890.	1891.		
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Nova Scotia.....	6,636,444 64	7,011,300 53	.....	374,855 89
New Brunswick.....	2,699,055 02	3,571,050 70	.....	871,995 68
Quebec.....	1,615,119 76	2,008,878 74	.....	393,758 98
Prince Edward Island .....	1,041,109 20	1,238,733 81	.....	197,624 61
British Columbia....	3,481,432 29	3,008,755 30	.....	472,677 00
Ontario.....	2,009,637 37	1,806,389 68	203,247 00	.....
Manitoba and North-west Territories..	232,104 05	332,969 29	.....	100,865 24
Total.....	17,714,902 33	18,977,878 05	.....	.....
Increase over 1890.....	.....	.....	.....	1,263,175 72

## COMPARATIVE STATEMENT

OF Production in each Branch of the Fisheries in the respective Provinces of the Dominion of Canada, in 1890 and 1891.

## PROVINCE OF NOVA SCOTIA.

Kinds of Fish.		1890.		1891.	
		Quantity.	Value.	Quantity.	Value.
			\$ cts.		\$ cts.
Salmon.....	Brls.	2,042	32,672 00	716	11,456 00
do fresh.....	Lbs.	287,722	57,544 40	358,697	71,739 80
do smoked.....	"	2,892	578 00	9,142	1,828 40
do preserved.....	Cans.	8,032	1,205 40	10,600	1,590 00
Mackerel.....	Brls.	70,509	1,057,635 00	99,877	1,398,278 00
do preserved.....	Cans.	91,408	11,985 00	11,800	1,416 00
do fresh.....	No.	770,090	46,254 00		
Herring.....	Brls.	126,054	504,216 00	131,335	591,009 50
do smoked.....	Boxes.	17,160	4,290 00	122,850	30,712 50
do fresh or cans.....	Lbs.	Cans 6,336	633 60		
Alewives.....	Brls.	21,448	96,516 00	19,770	80,966 50
do smoked.....	No.	130,000	1,040 00	120,100	960 00
Cod, dried.....	Cwt.	607,904	2,431,616 00	545,977	2,456,899 00
Cod tongues and sounds.....	Brls.	1,355	13,550 00	942	8,083 00
Haddock.....	Cwt.	110,174	440,696 00	121,721	426,023 50
do fresh.....	Lbs.	400,000	16,000 00	740,000	14,800 00
do smoked.....	Cases.			10,030	26,472 00
Finnan haddies.....	Lbs.	158,000	12,640 00		
Pollock.....	Cwt.	49,428	197,712 00	56,866	170,598 00
Hake.....	"	59,335	237,440 00	55,487	166,461 00
do sounds.....	Lbs.	30,103	30,103 00	28,700	21,523 50
Halibut.....	"	687,657	68,765 50	1,120,641	112,063 40
Shad.....	Brls.	1,607	15,314 00	2,130	21,300 00
Bass.....	Lbs.	11,575	695 00	7,600	456 00
Trout.....	"	147,941	14,794 10	198,180	19,817 50
Squid.....	Brls.	13,039	52,056 00	8,286	33,144 00
Smelts.....	Lbs.	421,740	25,304 40	432,341	21,616 75
Eels.....	Brls.	3,342	32,420 00	2,335	23,350 00
Frost fish.....	"			150	1,500 00
Scallops.....	Doz.			400	200 00
Oysters.....	Brls.	3,013	9,039 00	4,318	12,954 00
Lobsters, preserved.....	Cans.	6,161,716	739,406 44	6,323,628	885,306 98
do shipped fresh, alive, &c.....	Tons.	5,632	211,016 00	5,390½	215,620 00
Fish oils.....	Galls.	269,418	107,766 80	253,182	101,272 20
Guano.....	Tons.	267	8,715 00	383	9,575 00
Fish used as bait.....	Brls.	57,554	86,332 00	61,969	49,352 50
do manure.....	"	19,228	9,614 00	27,949	13,975 50
Amount sold in Halifax market.....					
Home consumption of various counties, as per return.....			59,600 00		
Clams.....			1,280 00		980 00
Total.....			6,636,444 64		7,011,300 53
Increase in 1891.....					374,855 89



COMPARATIVE STATEMENT of Production in each Branch of Fisheries, &c.—*Continued.*

## PROVINCE OF NEW BRUNSWICK.

Kinds of Fish.		1890.		1891.	
		Quantity.	Value.	Quantity.	Value.
			\$ cts.		\$ cts.
Cod.....	Cwt.	77,689	311,362 50	86,850	390,825 00
Herring.....	Brls.	74,401	297,604 00	90,933	409,198 50
do smoked.....	Boxes	1,314,136	330,284 00	2,247,735	561,933 75
do frozen.....	No.	13,700,000	82,200 00	1,000,000	7,500 00
Mackerel.....	Brls.	3,877	58,155 00	17,379	243,306 00
do preserved, in cans.....	Lbs.	45,520	5,462 40	91,808	11,016 96
do fresh.....	Hhds.			242	1,936 00
Haddock.....	Cwt.	13,615	54,460 00	13,892	48,622 00
Pollock.....	"	18,959	75,836 00	24,382	73,146 00
Hake.....	"	28,528	114,112 00	40,383	121,149 00
Finnan haddies in cans.....	Lbs.			20,000	2,400 00
Halibut.....	"	103,250	10,325 00	382,275	38,227 50
Salmon, pickled.....	Brls.	60	960 00		
do fresh, in ice.....	Lbs.	1,084,805	219,996 00	1,317,420	263,484 00
do preserved, in cans.....	"	6,280	942 00	25,720	3,858 00
do smoked.....	"	2,400	480 00	2,030	406 00
Alewives.....	Brls.	20,577	92,596 50	22,404	100,818 00
Trout.....	Lbs.	74,900	8,710 00	109,928	10,992 80
Smelts.....	"	3,786,952	227,537 12	4,674,532	233,726 60
Shad.....	Brls.	5,116	51,160 00	5,957	59,570 00
Eels.....	"	1,063	10,630 00	1,070	10,700 00
Sardines.....	Hhds.	18,820	94,050 00	33,615	151,267 50
do in cans.....	Cases.	400	1,800 00	8,333	20,000 00
Bass.....	Lbs.	81,600	4,896 00	26,009	1,560 54
Pickarel.....	"	145,200	8,772 00	125,000	6,250 00
Perch.....	"	26,200	786 00	15,020	450 60
Sturgeon.....	"			250	25 00
Oysters.....	Brls.	16,710	50,130 00	14,934	44,802 00
Lobsters, preserved.....	Cans.	2,365,256	283,830 72	3,330,120	466,216 80
do.....	Tons.	1,014	50,130 00	922	36,880 00
Cod tongues and sounds.....	Brls.	61	610 00	106	1,060 00
Hake sounds.....	Lbs.	27,591	27,591 00	42,300	31,725 00
Fish oils.....	Galls.	97,181	38,872 40	64,471	25,788 40
Fish guano.....	Tons.	335	8,375 00	387	9,675 00
Fish used as manure.....	Brls.	33,740	16,870 00	36,307	18,153 50
do bait.....	"	47,159	71,338 50	60,664	79,236 00
Squid.....	"	99	396 00	62	248 00
Frost fish.....	Lbs.	224,672	9,244 88	255,350	12,767 50
Flounders.....	"	79,000	7,900 00	126,575	6,328 75
Clams.....	Brls.		9,650 00	300	1,800 00
Fish used in district No. 1, not included above.....			64,000 00		64,000 00
Total.....			2,699,055 02		3,571,050 70
Increase in 1891.....					871,995 68

COMPARATIVE STATEMENT of Production in each Branch of Fisheries, &c.—*Continued.*

## PROVINCE OF QUEBEC.

Kinds of Fish.		1890.		1891.	
		Quantity.	Value.	Quantity.	Value.
			\$ cts.		\$ cts.
Cod.....	Cwt.	153,709	614,836 00	201,622	907,299 00
Herring, pickled.....	Brls.	19,892	79,568 00	31,637	142,366 50
do smoked.....	Boxes	865	216 25	1,320	330 00
Mackerel.....	Brls.	5,023	75,345 00	4,518	63,252 00
Haddock.....	Cwt.	1,298	5,192 00	1,923	6,730 50
Halibut.....	Lbs.	92,001	9,200 10	80,781	8,078 10
Salmon, pickled.....	Brls.	442½	7,080 00	488	7,808 00
do fresh.....	Lbs.	570,756	114,151 20	633,717	126,743 40
Shad.....	"	108,103	6,486 18	56,441	3,386 46
Eels.....	"	2,299,816	77,988 96	789,701	47,382 06
do pickled.....	Brls.	72	720 00	49	490 00
Sardines.....	"	6,634	19,902 00	7,223	21,669 00
Sturgeon.....	Lbs.	330,370	19,822 20	269,001	16,140 06
Trout.....	"	415,975	41,597 50	427,350	42,735 00
do.....	Brls.	153	1,530 00	85	850 00
Winninish.....	Lbs.	100,000	6,000 00	100,000	6,000 00
Whitefish.....	"	178,668	14,293 44	115,562	9,244 96
Maskinongé.....	"	118,440	7,106 40	87,535	5,252 10
Bass.....	"	105,300	6,318 00	114,370	6,862 20
Pickarel.....	"	274,762	16,485 72	251,601	12,580 05
Pike.....	"	310,200	15,510 00	284,710	14,235 50
Tom cod.....	Bush.	50,000	25,000 00	15,000	7,500 00
Cod tongues and sounds.....	Brls.	183	1,830 00	219	2,190 00
Lobsters, canned.....	Lbs.	616,218	73,946 16	960,995	134,539 30
Small and mixed fish.....	Brls.	21,610	87,612 00	16,597	68,799 00
Seal skins.....	No.	17,045	17,045 00	20,787	25,983 75
Porpoise skins.....	"	549	2,271 00	301	1,204 00
Fish oils.....	Galls.	206,796	82,718 40	253,806	101,522 40
Fish used as bait.....	Brls.	49,492	74,238 00	44,628	66,942 00
do manure.....	"	61,066	30,533 00	112,120	56,060 00
Smelts.....	Lbs.	100,745	5,037 25	79,028	3,951 40
Fish used as local consumption.....	Brls.	18,885	75,540 00	22,688	90,752 00
Total.....			1,615,119 76		2,008,878 74
Increase in 1891.....					393,758 98

COMPARATIVE STATEMENT of Production in each Branch of Fisheries, &c.—*Continued.*

## PROVINCE OF PRINCE EDWARD ISLAND.

Kinds of Fish.	1890.		1891.	
	Quantity.	Value.	Quantity.	Value.
		\$ cts.		\$ cts.
Cod..... Cwt.	16,432	65,728 00	14,520	65,340 00
Herring..... Brls.	47,502	190,008 00	40,468	182,106 00
Mackerel..... "	16,837	252,555 00	17,487	244,818 00
do preserved..... Cans.	146,546	17,585 52	46,240	5,548 80
Haddock..... Cwt.	770	3,080 00	842	2,947 00
Hake..... "	6,472	25,888 00	8,515	25,545 00
Salmon, fresh..... Lbs.	4,700	940 00	3,624	693 60
Alewives..... Brls.	511	2,299 50	730	3,285 00
Halibut..... Lbs.	5,422	542 20	6,000	600 00
Bass..... "	200	12 00		
Trout..... "	63,100	6,310 00	39,200	3,920 00
Smelts..... "	326,330	19,519 80	285,200	13,691 00
Eels..... Brls.	3,012	30,120 00	830	8,300 00
Oysters..... "	35,203	105,609 00	41,030	123,090 00
Lobsters, preserved, in cans..... Lbs.	2,416,794	290,015 28	3,670,414	513,857 96
Cod sounds..... Brls.	7	70 00	11	110 00
Fish oils..... Galls.	11,361	4,544 40	13,388	5,335 20
Manure..... Brls.	8,450	4,225 00	22,010	11,005 00
Bait..... "	11,385	17,077 50	11,470	17,205 00
Shad..... "	5	50 00	3	30 00
Hake sounds..... Lbs.	9,860	4,930 00	15,075	11,306 25
Total.....		1,041,109 20		1,238,733 81
Increase in 1891.....				197,624 61



COMPARATIVE STATEMENT of Production in each Branch of Fisheries, &c.—*Continued.*

## PROVINCE OF BRITISH COLUMBIA.

Kind of Fish.	1890.		1891.	
	Quantity.	Value.	Quantity.	Value.
		\$ cts.		\$ cts.
Salmon..... Brls.	2,994	29,940 00	1,353	16,236 00
do fresh..... Lbs.	1,739,015	173,901 50	2,090,853	209,085 30
do preserved, in cans..... "	19,895,992	2,387,519 04	15,170,608	1,517,060 80
do smoked..... "	58,300	11,660 00	121,300	24,260 00
Herring, fresh and salted..... "	329,500	16,475 00	375,400	17,659 00
do smoked..... "	27,500	5,500 00	31,300	3,756 00
Trout, fresh..... "	52,900	5,290 00	63,600	6,360 00
Sturgeon..... "	396,000	19,800 00	324,500	16,225 00
Halibut, fresh..... "	636,800	31,840 00	1,130,000	56,500 00
Skil, salted..... Brls.	290	3,480 00	137	1,644 00
Clams, sacks..... Sacks.	3,000	5,250 00	5,500	9,625 00
do canned..... Lbs.			30,160	3,619 20
Mussels..... Sacks.	300	600 00	300	525 00
Oysters..... "	3,500	7,000 00	1,500	3,000 00
Oolachans, pickled..... Brls.	378	3,780 00	1,025	8,200 00
do smoked..... Lbs.	1,000	200 00	4,700	705 00
do fresh..... "	38,000	3,800 00	72,000	3,600 00
Fur seal skins..... No.	44,751	492,261 00	52,995	794,925 00
Hair do..... "	10,200	7,650 00	5,175	5,175 00
Sea otter skins..... "	102	10,200 00		
Fish oils..... Galls.	162,264	81,132 00	249,500	124,750 00
Crabs and prawns..... "		30,240 00		30,200 00
Smelts, fresh..... Lbs.	100,750	6,045 00	81,000	4,050 00
Assorted or mixed fish..... "	426,025	21,301 25	411,500	20,575 00
Rock cod..... "	200,750	10,037 50	146,900	7,345 00
Tooshqua, fresh..... "	309,000	15,450 00	449,500	22,475 00
Fish products..... "		1,080 00		1,200 00
Fish for home consumption, Chinese labour- ers not included above..... Lbs.		100,000 00		100,000 00
Total.....		3,481,432 29		3,008,755 30
Increase in 1891.....				472,677 00

COMPARATIVE STATEMENT of Production in each Branch of Fisheries, &c.—*Concluded.*

## PROVINCE OF ONTARIO.

Kinds of Fish.		1890.		1891.	
		Quantity.	Value.	Quantity.	Value.
			\$ cts.		\$ cts.
Whitefish.....	Brls.	4,067	40,670 00	2,061	20,610 00
do .....	Lbs.	6,782,292	542,583 36	6,073,844	485,907 52
Salmon trout.....	Brls.	3,959	39,590 00	3,173	31,730 00
do .....	Lbs.	5,074,650	507,465 00	5,449,385	544,938 50
Herring.....	Brls.	6,425	25,700 00	4,225	19,012 50
do .....	Lbs.	8,435,950	421,797 50	8,233,250	329,330 00
Maskinongé .....	"	651,406	39,084 36	655,495	39,329 70
Bass.....	"	778,795	46,727 70	651,345	39,080 70
Pickrel.....	"	2,216,520	132,991 20	1,993,323	99,666 15
Pike .....	"	637,420	31,871 00	602,118	30,105 90
Sturgeon.....	"	1,132,970	67,978 20	882,475	52,948 50
Eels.....	"	125,235	7,514 10	52,995	3,179 70
Coarse fish.....	"	2,556,515	76,695 45	2,688,517	80,655 51
Fish for home consumption.....	"	965,650	28,969 50	996,500	29,895 00
Total.....			2,009,637 37		1,806,389 68
Decrease in 1891.....					203,247 69

## MANITOBA AND NORTH-WEST TERRITORIES.

Whitefish.....	Lbs.	3,402,222	170,111 10	5,162,235	275,422 92
Pickrel (doré).....	"	505,707	15,171 21	620,755	15,633 87
Pike (jackfish).....	"	744,082	14,881 64	924,529	18,490 58
Sturgeon.....	"	187,830	9,391 50	49,020	2,451 00
Tullibee.....	"	178,700	3,574 00	246,240	5,574 80
Mixed fish.....	"	948,730	18,974 60	1,539,612	15,396 12
Total.....			232,104 05		332,969 29
Increase in 1891.....					100,865 24

## RECAPITULATION

SHOWING the Number, Tonnage and Value of Vessels and Boats; Value of all Fishing Materials, &c., and Number of Fishermen in the Dominion of Canada, 1891.

PROVINCES.	FISHERMEN.		VESSELS.			BOATS.		GILL NETS AND SEINES.		Value of Pound Nets, Traps, &c.	Value of Lobster Plant.	Approximate Value of Freezers, Smoke-houses and other Fixtures not itemized.	Total Value.
	Vessels.	Boats.	Number.	Tonnage.	Value.	Number.	Value.	Fathoms.	Value.				
Nova Scotia.....	5,792	18,584	580	27,424	1,231,575	13,344	292,760	2,284,906	592,717	152,610	346,771	109,799	2,726,232
New Brunswick. . .	681	11,541	134	2,186	67,940	5,794	276,454	530,612	389,881	175,851	262,848	259,906	1,432,880
Prince Edward Island .	383	3,643	66	2,212	63,140	1,363	42,447	100,000	69,001	5,700	169,000	27,000	376,288
Quebec.....	394	12,136	54	1,901	47,600	6,429	173,068	268,823	158,998	71,308	81,376	.....	532,350
Ontario . . . . .	273	2,647	*58	1,444	125,950	1,145	108,832	1,441,695	241,305	108,080	.....	.....	584,167
British Columbia . . .	†1,112	7,554	130	4,109	570,150	1,858	103,238	285,818	178,257	6,875	.....	821,000	1,679,520
Manitoba.....	31	804	*5	101	19,000	504	11,016	102,225	14,733	.....	.....	.....	44,749
Totals.....	8,666	56,909	1,027	39,377	2,125,355	30,438	1,007,815	5,014,079	1,644,892	520,424	859,995	1,217,705	7,376,186

\* Tugs.

† Including seal hunters.

NOTE.—For further details see pages 62, 95, 105, 134, 149, 162, 175, 200.



## RECAPITULATION.

TABLE showing the Total Value of the Fisheries in the respective Provinces of Canada, from 1870 to 1891, inclusive, as compiled from the Annual Reports of the Department of Fisheries.

Years.	Nova Scotia.	New Brunswick.	Prince Edward Island.	Quebec.	Ontario.	British Columbia.	Manitoba and North-West Territories.	Total for Canada.
1870.	\$ 4,019,425	\$ 1,131,433	No data	\$ 1,161,551	\$ 264,982	No data	No data	\$ 6,577,391
1871.	5,101,030	1,185,033	do	1,093,612	193,524	do	do	7,573,199
1872.	6,016,835	1,965,459	do	1,320,180	267,633	do	do	9,370,116
1873.	6,577,087	2,285,662	207,595	1,391,564	293,691	do	do	10,754,997
1874.	6,652,302	2,685,794	288,863	1,608,660	446,267	do	do	11,681,886
1875.	5,573,851	2,427,654	298,927	1,596,759	453,194	do	do	10,350,385
1876.	6,029,050	1,953,389	494,967	2,097,668	437,229	104,697	do	11,117,000
1877.	5,527,858	2,133,257	763,036	2,560,147	438,223	583,433	do	12,005,934
1878.	6,131,000	2,305,790	840,344	2,664,055	348,122	925,767	do	13,293,678
1879.	5,732,937	2,554,722	1,402,301	2,820,395	367,133	631,766	do	13,529,254
1880.	6,291,061	2,744,447	1,675,089	2,631,556	444,491	713,335	do	14,499,979
1881.	6,214,782	2,930,904	1,955,290	2,751,962	500,903	1,454,321	do	15,817,162
1882.	7,131,418	3,192,339	1,855,687	1,976,516	825,457	1,842,675	do	16,824,092
1883.	7,680,374	3,185,674	1,272,468	2,138,967	1,027,033	1,644,646	do	16,958,192
1884.	8,763,779	3,730,434	1,085,619	1,694,561	1,133,724	1,358,267	do	17,766,404
1885.	8,283,922	4,005,431	1,293,430	1,719,460	1,342,692	1,078,038	do	17,722,973
1886.	8,415,362	4,180,227	1,141,991	1,741,382	1,435,998	1,577,348	186,980	18,679,288
1887.	8,379,782	3,559,507	1,037,426	1,773,567	1,531,850	1,974,887	126,084	18,386,103
1888.	7,817,030	2,941,863	876,862	1,860,012	1,839,869	1,902,195	180,677	17,418,510
1889.	6,346,722	3,067,039	886,430	1,876,194	1,963,123	3,348,067	167,679	17,653,256
1890.	6,636,444	2,699,055	1,041,109	1,615,119	2,009,637	3,481,432	232,104	17,714,902
1891.	7,011,300	3,571,050	1,238,733	2,008,878	1,806,389	3,008,755	332,969	18,973,786
Totals.	146,362,951	60,436,163	19,656,167	42,002,804	19,379,564	25,629,629	1,229,493	314,792,487

COMPARATIVE TABLE, showing Number, Tonnage and Value of Vessels and Boats engaged in the Fisheries of Canada, together with the Value of Fishing Materials employed, from 1879 to 1891.

Years.	Vessels.			Boats.		Value of Nets and Seines.	Value of other Fishing Material.	Total of Capital Invested.
	No.	Tonnage.	Value.	No.	Value.			
			\$		\$	\$	\$	\$
1879.....	1,183	43,873	1,714,917	25,616	854,289	988,698	456,617	4,014,521
1880.....	1,181	45,323	1,814,688	25,266	716,352	985,978	419,564	3,936,582
1881 .. .. .	1,120	48,389	1,765,870	26,108	696,710	970,617	679,852	4,113,049
1882.....	1,140	42,845	1,749,717	26,477	833,137	1,351,193	823,938	4,757,985
1883.....	1,198	48,106	2,023,045	25,825	783,186	1,243,366	1,070,930	5,120,527
1884.....	1,182	42,747	1,866,711	24,287	741,727	1,191,579	1,224,646	5,014,663
1885.....	1,177	48,728	2,021,633	28,472	852,257	1,219,284	2,604,285	6,697,459
1886 .....	1,113	44,605	1,980,411	28,137	850,545	1,263,152	2,720,187	6,814,295
1887.....	1,168	44,485	1,989,840	28,092	875,316	1,499,328	2,384,356	6,748,840
1888.....	1,137	43,247	2,017,558	27,384	859,953	1,594,992	2,390,502	6,863,005
1889.....	1,100	44,936	2,064,918	29,555	965,010	1,591,085	2,149,138	6,770,151
1890. ....	1,069	43,084	2,152,790	29,803	924,346	1,695,358	2,600,147	7,372,641
1891.....	1,027	39,377	2,125,355	30,438	1,007,815	1,644,892	2,598,124	7,376,186

COMPARATIVE TABLE showing the Number of Men employed in the Fishing Industry in Vessels and Boats since the Year 1879 to 1891.

Years.	Number of Men in Vessels.	Number of Men in Boats.	Total Number of Fishermen.
1879.....	8,818	52,577	61,395
1880.....	8,757	51,900	60,657
1881.....	8,359	50,679	59,056
1882.....	8,498	52,785	61,283
1883.....	9,966	52,259	62,225
1884.....	9,968	51,854	61,822
1885.....	9,539	53,282	62,821
1886.....	8,927	53,073	62,000
1887.....	8,911	55,247	64,158
1888.....	9,574	53,109	62,683
1889.....	9,621	55,382	65,003
1890.....	8,726	55,000	63,726
1891.....	8,666	56,909	65,575

## FISH-BREEDING.

The fish-breeding operations for the year 1891 are fully reported upon by the Superintendent of Fish Culture, and form Part II. of this supplement. This also contains a report on the first season's work at the lobster hatchery established at Bay-view, Prince Edward Island.

## CONCLUSION.

The usual statements relative to the expenditure and revenue of this department, fishing bounty statements, as well as the Fisheries Protection Service report, will be found in the main report already published.

The statistical statements herewith, being brought down to the 31st December in each year, it is impossible to have them compiled in time to be included in the preliminary report.

I have the honour to be, Sir,

Your obedient servant,

S. P. BAUSET,

*Acting Deputy Minister of Fisheries.*



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## APPENDIX A.

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# NOVA SCOTIA.

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District No. 1, comprising the four Counties of the Island of Cape Breton.—Inspector A. C. Bertram, North Sydney.

District No. 2, comprising the Counties of Cumberland, Colchester, Pictou, Antigonish, Guysboro', Halifax and Hants.—Inspector Robert Hockin, Pictou.

District No. 3, comprising the Counties of King's, Annapolis, Digby, Yarmouth, Shelburne, Queen's and Lunenburg.—Inspector J. R. Kinney, Yarmouth.

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### DISTRICT No. 1.

ANNUAL REPORT OF THE FISHERIES OF CAPE BRETON ISLAND, COMPRISING THE COUNTIES OF CAPE BRETON, INVERNESS, RICHMOND AND VICTORIA, FOR THE YEAR 1891, BY INSPECTOR A. C. BERTRAM.

NORTH SYDNEY, C.B., 31st December, 1891.

HON. CHARLES H. TUPPER,  
Minister of Marine and Fisheries,  
Ottawa.

SIR,—I have the honour to submit herewith my eighth annual report on the fisheries of District No. 1, comprising the four counties of the Island of Cape Breton, together with statistical tables showing in detail the catch of fish in each section and locality, with synopsis of reports of overseers for the year just closed.

The principal feature of last season's operations is, I regret to say, a large decrease in the yield of the fisheries of the island—a total of \$1,086,721.90 in 1891, against \$1,510,575.92 in 1890, showing a decrease of \$423,854.02. This decrease is made up largely in the catch of Richmond County, where a large number of men usually engaged in the fisheries sought and obtained employment at the various public works going on during the year. Of late years the fisheries have not been remunerative, and whenever our island people found it possible to obtain employment by day's labour without leaving the bounds of their respective counties, I find them very ready to abandon the fisheries.

In the early part of the season there were frequent storms which interfered with the prosecution of the industry to a very great extent, so much so that but for the extension of time granted the lobster fishery, those engaged in it would have met with loss. The interest taken by the department in the curing of herring has attracted and stimulated the interest of fishermen and packers generally. On the approach of the herring fishing season, extensive preparations were made to take and cure this palatable article of food in larger quantities, but, unfortunately, a succession of easterly and south-easterly storms interfered with those plans, and, as a result, the catch was small as compared with that of previous years.

The preservation of fresh bait is a question which must engage the earnest attention of our fishermen before they can possibly expect improvement in their condition, and while I have repeatedly urged the storing up of ice in sheds for such purpose, I find that very few avail themselves of the advantage this inexpensive

remedy places within their reach. Here again, I think the advantage lies in districts where large buyers are located, for only by these will the necessary outlay for preserving bait be incurred, as is seen by the enterprise of a firm at Canso, N. S., which I understand at the suggestion of the department, has adopted new and improved methods of preserving bait and as a consequence is reaping a rich harvest therefrom.

Very general and emphatic commendation is accorded the department for its recent regulation and legislation respecting purse-seining. In my district there lives a gentleman who has been largely engaged in this mode of fishing, and his praises of this measure are far from stinted. Indeed; he has not only declared his intention of abandoning the seining business, but from an appreciative knowledge of the benefits to accrue to the fisheries of the island therefrom, he affirms his intention to do all in his power to further the views of the department in this respect.

It seems surprising that, with all the natural advantages we enjoy, such as timber within easy reach for building vessels, cheap labour and close proximity to the fishing grounds frequented by the fishermen from the United States and Western Nova Scotia; that hardly any of our business men will venture on building and fitting out vessels similar to those which frequent our fishing grounds from other places. When discussing this question with fishermen in the Northern districts of the island, where timber is abundant, they point out to their exposed coast, which to some extent is undoubtedly against them, but I am quite sure, however, that were any attempts in this direction seriously entered upon, capital harbours of refuge could be made at Ingonish and Aspy Bay. There is also a very good harbour at St. Ann's; the Big Bras d'Or Lake is not difficult of entrance, while Sydney Harbour and many others on the south eastern coast of the island are convenient and easy of approach. I am afraid that until our island fishermen follow the example of western Nova Scotia fishermen and build a class of vessels fit to prosecute the fishery their condition will not materially improve. The shore fisheries are subject to fluctuations, and the fish often move out into deep water beyond the reach of the small class of inferior boats owned by the average local fishermen. The obvious course for our fishermen to pursue, is therefore to build a class of vessels such as will enable them to follow the fish. This has been successfully done by the fishermen of Lockport, Lunenburg, and other places in Nova Scotia, and it could be accomplished with even greater success by our Cape Breton fishermen, owing to superior natural advantages. There is no doubt that if the fishermen of certain districts would club together and replace the present class of fishing boats in each locality with schooners of say 50 to 100 tons, the change would ensure greater success and prosperity. Until this is done, I see no chance of material improvement in the condition of our fishermen.

The fair prices obtained for fish products during the season has enabled the fishermen to net a good average year's earnings, as will be seen by the following table :

Counties.	Men.		Increase.	Decrease.	Yield per Man.		Increase.	Decrease.
	1890.	1891.			1890.	1891.		
Cape Breton .....	1,502	1,652	150	.....	126.54	118.73	....	7.81
Inverness .....	2,191	2,437	246	.....	172.22	141.03	....	31.19
Richmond .....	3,052	2,150	.....	902	211.22	138.91	.....	72.31
Victoria .....	2,165	2,003	.....	162	86.63	123.83	37.20	.....



The redeeming feature in the year's product may be said to be the high prices obtained by the fishermen for nearly all kinds of fish caught. This helped to some extent to make up for a deficiency in catch.

#### CODFISH.

In this valuable branch of the fishing industry the returns show a decrease of 62,366 cwt. as compared with the quantity taken last year. This decrease is mainly confined to the county of Richmond where a large number of men found employment on the St. Peter's Canal and other public works. Another cause which contributed to the decrease was the scarcity of bait, which was felt in almost every district on the island. And a further drawback was occasioned by the succession of heavy storms which prevailed during the summer months. More cod were caught in November and December than in any three previous months, and it is not impossible that fishermen will make a good average season's catch before the winter sets in, as up to the date of writing the weather continues unusually mild; fish are reported abundant along the shores and there is no scarcity of bait. Late fall fishing, when the weather is at all favourable, is more remunerative than summer fishing. The fish appear to strike more in shore during the autumn season, and bait is more plentiful and more easily kept fresh.

#### HERRING.

There is a decrease of 6,446 barrels in the catch of herring. The falling off is principally confined to summer herring. Just at the time when these fish were striking in, a heavy easterly storm sprang up which lasted for several days. Fishermen's nets were torn or destroyed, and before the storm abated, most of the highly prized fish had departed. There had been more extensive preparations than usual made for this branch of the fishery, but in consequence of this unprecedented stormy weather only a very small quantity of the summer run of herring was secured. Towards the close of the season, however, an excellent quality of herring struck in the bays and harbours along the coast, and with favourable weather fishermen have undoubtedly secured more than sufficient for home consumption. The quantity thus taken can only appear in next season's statistics.

#### MACKEREL.

There is a falling off in the catch of mackerel this year of 3,720 barrels and 23,600 cans, as compared with last year's returns. This shortage is due solely to the scarcity of these fish on our coast. During the spring and fall, the fish appeared in smaller numbers than in former years. Climatic changes or currents undoubtedly caused the mackerel to pass without striking inshore as usual. A remarkable feature of this fishery was the large schools of young mackerel which visited our coast late in the fall. These fish were very abundant in the Bras d'Or Lake, but fishermen did not interfere with them owing to the unusual small size. Fishermen think that as a result of so many young mackerel being seen in our waters, this branch of the fishery will be good next year.

#### SALMON.

There is a decrease of 113 barrels of salmon pickled and of 9,252 lbs. fresh, but an increase of 3,524 lbs. in canned salmon. The July storms interfered with the success of this fishery, several nets were destroyed by gales, and in some districts the weather kept so boisterous, that fishermen were prevented from visiting their nets for several days at a time. There is nothing however to show that these fish were not as abundant as usual in our coastal waters. The rivers were fairly supplied and anglers enjoyed good sport at the Margaree. Salmon ascended the rivers, notably the Margaree, Middle and Baddeck Rivers, River Dennis and River Inhabitants in much larger numbers than usual. An impression prevails among the residents of Margaree



that two different runs of Salmon visit that river—the July run and the October run. The July run enter the river and ascend to the head waters where they spawn, returning to the ocean late in the fall.

The October run remain in the pools all winter and go back to sea in April or May when the ice leaves the rivers. These fish do not return to the rivers until the following autumn and from May till October remain in deep waters, and are therefore of no benefit to the inhabitants. There is also an impression that spawn for the hatchery should be taken from the July run of salmon and not from the fall run. Until this change is made it is claimed that the rivers cannot be much benefited by artificial fish breeding. There is no doubt that salmon which enter the Margaree in the autumn months remain in the deep pools all winter and return to salt water in the spring. These fish on their return to salt water are in poor condition and altogether unfit for food. As salmon appear on the coast and enter the Margaree about the last of June or first of July in prime condition, it is hardly probable that they are the same run of fish. If they are not, it is evident that the breeding stock taken from the autumn run by our Hatchery is not likely to increase the numbers which enter the Margaree in the early summer. As an experiment the manager of the hatchery at Sydney might be instructed to breed from the July run of Salmon instead of from the autumn run as is now done.

#### HALIBUT.

Although the various banks surrounding this island are known to be frequented by halibut, our fishermen do not take to this branch of the fishing industry. There are two reasons for it. The first is that they are not fitted out for this heavy fishery. The second is that the local market for fresh halibut is very limited. What is needed to make this fishery a success is a class of suitable fishing schooners and some freezers located in one or two districts, where the fish could be preserved fresh and shipped in ice to the Upper Province markets.

#### ALEWIVES.

The returns show a decrease of 1,124 barrels in this branch of the fishery over those of last year. These fish, although considered an inferior article of food, are yet sought after keenly. They strike in at a season when fresh bait is most required. Large quantities are used by the poor people in the country districts for food. The scarcity of these fish last spring was much felt. It appears that they are yearly becoming less numerous on the coast.

#### LOBSTERS.

This branch of the fishery suffered severely this season owing to the succession of gales which prevailed. The returns show a falling off of 739,341 cans. In several districts the storms completely demolished the traps and trawls, and some factories had to shut three weeks before the close season began, owing to the expense of replacing the gear destroyed. Other factories lost from eight to twelve days in replacing their damaged outfit. Lobsters were very abundant, and had the season not been exceptionally stormy, there would have been an increase instead of a decrease to report. The short extension granted by the Government saved heavy losses. Next season, it is expected that several factories will begin operations for the first time. The department is very wise in taking steps to control this fishery by the proposed system of issuing licenses to factories. Should the experiment of shipping live lobsters to England, prove successful, eastern Cape Breton should supply a fair share of the demand. The proximity of our island to these markets and the quantity and excellent quality of our lobsters gives Cape Breton an advantage over other places.

#### FISH OIL.

The statistics show an increase of 10,733 gallons of fish oil. Considering the decrease in the catch of cod this increase in fish oil appears strange; but notwithstanding a shortage in the catch of cod, more cod oil was manufactured this year

than last. The large increase, however, is not made up altogether of cod oil, but of blackfish oil; large schools of these fish having visited our grounds this year—not for thirty years were so many seen and taken by our fishermen. These fish are, however, unwelcome visitors, as they frighten all other kinds of fish off the coast, mackerel and herring particularly, in addition to the large numbers that are devoured by these black monsters. They are considered more of an injury than a benefit to our fishermen.

#### THE RIVERS.

There are no fish-passes in any of our streams. Milling is carried on to such a limited extent that the use of fishways have not been found necessary in more than one or two localities, and even at these places it is doubtful whether there is a sufficient body of water to make a fish-pass efficient. The department has, however, called for a report with a view of placing one of the Hockin-patent fishways on a Cape Breton stream. It is contemplated by the department to remove some natural obstructions in Grand River, Richmond County, so as to enable fish to reach the upper waters. The obstructions referred to consist of solid rock which will require to be blasted. An expenditure of about \$900 would be necessary to enable fish to reach some excellent spawning grounds. A similar expenditure is proposed on Irish Brook, Cape Breton County, where valuable spawning grounds would also be made accessible to salmon and trout. The various streams in this district were well protected during the past season, and with the exception of Middle River, Victoria County, sea-trout was found in abundance, much to the delight of anglers who visit these streams during the summer. Owing to the course of Middle River (once a splendid stream for sea-trout), being changed by freshets and the shallowness of the water, it was not frequented last season by trout in such large numbers as formerly. Of late years, during fall freshets, the course of the river has been greatly changed, and much damage has been done to farms through which the river flows. No efforts have been made by land owners to protect their property. This change in the river and the want of deep pools in July and August have been the cause of the absence of sea-trout. Salmon only visit this river during the spawning season, when they ascend in very large numbers.

Under instructions from the department, I began the holding of fishery courts in each of the four counties of my division. In Cape Breton County, there were five convictions; in Inverness County, four; in Richmond County, six; and in Victoria County, one. In the last named county, the defendant after service of summons left the country for the United States, before the date of trial. Judgment was, however, entered against him for \$20 and costs, or forty days in jail. In Inverness, two young men accused of poaching also left the country for the United States. One of the parties had been served with a summons to stand his trial at the fishery court, and in this case judgment was also recorded for \$20 and costs, or forty days in jail. In seven cases the defendants were discharged after a hearing, for want of evidence, and in three other cases, the fishery officers are at present engaged securing evidence which, it is hoped will lead to convictions.

The trial of offenders before these courts has had a most salutary effect, and there is no doubt, but in future the fishery regulations will be better observed.

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### SYNOPSIS OF FISHERY OVERSEERS' REPORTS FOR THE ISLAND OF CAPE BRETON.

#### CAPE BRETON COUNTY.

*Overseer Francis Quinan* reports that at the beginning of the season's fishing, the prospects were good for all branches of the fishery, but the heavy storms which prevailed from the middle of June to the first week in August materially interfered with the success of the shore fishermen. Notwithstanding this drawback the yield



of salmon and herring shows an increase in this division over that of last year. Lobster packing began on the 23rd May and the catch and quality were good until about the 20th June when heavy storms proved disastrous to the fishing gear. For the remainder of the season the catch was not as good as in previous years, as the fishermen who lost their gear by storms, in many cases gave up fishing for the remainder of the season. During the early part of the season the cod fishery was good but severe storms and want of bait militated seriously against those engaged in this fishery. Overseer Quinan regrets that shore fishermen do not realize the value of an ice supply for the preservation of bait. Salmon frequented the rivers of this division in larger numbers than of late years, which goes to show the good work of the Sydney hatchery. The regulations were well observed. Reports will occasionally be circulated of violations of the act, but upon investigation these reports invariably prove groundless.

*Overseer Alex. McDonald* reports that the season of 1891 cannot be considered a good fishing season in his district. This he ascribes to unusually stormy weather and scarcity of bait. The fishermen made the usual preparations at the beginning of the season for fishing mackerel, but to their great disappointment and loss this heretofore fairly successful spring fishery proved a failure, the spring run of these fish not having struck as usual. The mackerel caught in the spring are used for bait to some extent and fishermen were thus deprived of bait for the prosecution of other branches of the fishery early in the season. This scarcity of bait militated seriously against the cod fishery. Such a state of things coupled with stormy weather are the main causes for a decrease in the yield. The July run of herring which local fishermen so much depend upon was also a partial failure, as the fish did not strike in as abundantly as in former years. The lobster fishery was vigorously prosecuted in this division, more so than any other branch of the fishery. Severe storms, however, destroyed a great part of the fishermen's gear. The extension granted saved the fishermen from loss and enabled them to make the season a fairly successful one. Five factories were in operation in this division and this number will be increased to six next year. There is no indication of the grounds becoming depleted, and lobsters were found as abundant last season as in previous years. Several of the cod and herring fishermen now engage in lobster fishing during the lobster season, as they find the latter more remunerative. Very few halibut were caught in this division, and this fishery is now prosecuted only to a very small extent. The salmon fishery seems to be constantly decreasing and fishermen say it does not pay to fit out for this fishery. The rivers, however, appeared to be well supplied with parent fish during the spawning season. The fishermen throughout this division are highly pleased with the recent legislation prohibiting purse seining. The fishery regulations were well observed during the past year.

*Overseer Wm. Burke* reports the spring catch, of all kinds of fish in his division above the average. This increase was most noticeable in codfish and lobsters. The summer catch of herring was comparatively good although there were fewer fish taken than during the corresponding period of some years; yet, as compared with last year there is a marked increase in this division. During the fall owing to bad weather and the presence of an extraordinarily large number of dog-fish in the shore waters, the local fishermen found it impossible to take any fish. Many nets were considerably damaged by schools of dog-fish and the herring saved from the nets were found to be unfit for market. This is the first season for years when these shores are visited by such unwelcome guests. The quality of mackerel caught with hook and net did not compare favourably with that of past years. Taking the fishery as a whole, the past season in this district has been better than that of last year and had it not been for the causes above referred to, the fishing season of 1891 would show a great improvement over previous years.

*Overseer Richard Hickey* reports a falling off in the principal branches of the fishing industries of his division, except in lobsters and salmon. Comparing the total value of the catch for 1891 with that of the previous year, there is a total decrease of only \$172.82. It will therefore be seen that although there is a shortage in the



catch, the past season has been almost as profitable as the previous one. This is accounted for by the fact that higher prices were obtained for almost every kind of fish. The most noticeable decrease is in the catch of summer herring, which almost proved a complete failure in several places. Cod shows a decrease, confined mainly to Little Bras d'Or Gut where the lobster fishery engaged most of the time of the fishermen during the early part of the season. Scarcity of bait prevented many from prosecuting this important branch of the fishing industry, as it was found difficult to secure even enough bait for the lobster fishery. The mackerel catch which of late years has been small, shows no signs of improvement and the number of barrels secured this season is even below the catch of last year. There is an increase in the catch of salmon. This fishery, although not prosecuted to any great extent, is one of the most profitable branches of our fishing industry and brings ready cash to the fishermen who dispose of their catch fresh in the local markets where these fish are always in demand. The most noticeable increase, is in the lobster fishery. In this division, there is only one lobster factory, which is situated at Little Bras d'Or Gut.

The proprietors pay out about \$4,500 each season to fishermen and others employed in factory work. Blustering weather and unusually heavy storms during the latter part of the lobster season destroyed a great number of traps, and had it not been for the extension granted by the department, this fishery would have shown a decrease. The season has been an exceptionally blustering one throughout, and the shore fishermen lost much time owing to their being unable to venture out on the banks in their fishing boats.

The great falling off in the summer herring fishery is due to the heavy easterly gales which prevailed during the month of July, just as herring were striking in. For several days fishermen could not visit their nets, and when the storm abated it was found that the schools had departed, and the greater part of the fish found in the nets were unfit for curing. The fishermen also lost several of their nets which were either carried away or destroyed by the storm. The regulations were well observed.

#### COUNTY OF INVERNESS.

*Overseer D. F. McLean* reports a falling off in the catch of the different kinds of fish as compared with that of 1890, except in herring, hake, haddock, squid and lobsters. The shortage in the catch of codfish is in a great measure due to the scarcity of bait, with stormy weather added as a minor cause. The catch of mackerel appears to be a thing of the past; the most noticeable decrease being in this branch. Mr. McLean considers that this is largely due to wholesale destruction of these fish by purse seines. A law is now fortunately placed on our statute book prohibiting this mode of fishing. It will take several years of protection, however, to report such an increase as to warrant an average catch to our boat fishermen. The increase in the catch of lobsters is due to two causes, viz.: 1st. The stimulus given to that branch of fishing by the remunerative prices paid to fishermen by the packers who sold their canned goods in advance to English and American markets to very good advantage. 2nd. The two additional factories canning in this section of the county. The close seasons and general fishery regulations were well observed. This is due to the fact that fishery officers have been continually on the watch, and, as a rule, the inhabitants are law abiding people. The new system of employing special fishery guardians where necessary, instead of the old plan of permanent fishery wardens, is quite an improvement and a step in the right direction. Salmon was abundant during the spawning season, especially in October. Three

trap nets were set in this district under license from the department, two at Port Hood and one at Port Hawkesbury. The following is the result of their operations during the season:—

1. John H. Murphy, Port Hood,

	Value.
Mackerel, 23½ bbls.....	\$150 00
Herring, 6 bbls.....	30 00
Codfish, 800 lbs.....	9 00
Mackerel, 2200 lbs.....	44 00
Squid, 54 bbls.....	180 00
Total value.....	<u>\$413 00</u>

2. A. W. Morrison, Port Hood,

	Value.
Mackerel, 70 bbls.....	\$600 00
Herring, 20 bbls.....	120 00
Squid, 25 bbls.....	75 00
Total value.....	<u>\$795 00</u>

3. Langley & O'Brien, Port Hawkesbury,

	Value.
Herring, 10 bbls.....	\$18 50
Mackerel, 4,000 lbs.....	40 00
Squid, 1 bbl.....	3 75
Total value.....	<u>\$62 25</u>

*Overseer David Ross* reports a falling off in the catch of codfish as compared with that of last year. This decrease he attributes mainly to rough weather throughout the season. Codfish were fairly abundant, and had the weather proved favourable an increase would have been reported. The salmon fishery was better than for some years past. The run of fish was not so large as formerly, averaging about eleven pounds each. Still they were found abundant and turned out a profitable investment. Angling on the Margaree was fair, the river being visited by several tourists from abroad, particularly from the United States. *Overseer Ross* reports a marked decrease in the catch of mackerel, which was about 700 bbls less than that of the previous year. He attributes this falling off to the severe weather which prevailed about the time that mackerel made their appearance inshore. Two factories were engaged in canning lobsters and both had a fairly prosperous season. The number of factories will be increased to four next year.

*Overseer James Coady* reports a decrease in the total value of the fisheries of the eastern division of Inverness county. This decrease he attributes to severe weather, high winds having prevailed from the month of August to the close of the season. The fishermen of this district agree in stating that the weather during the past season was the most severe they have experienced for the past thirty years. Codfish shows a decrease of 1495 cwts., mackerel of 516 bbls, and haddock also a decrease. Herring, alewives and trout show about an average catch, while the salmon net fishery shows an improvement over last year. Surface fly fishing was good on the south-west branch of the Margaree River. The lobster canneries operating in this district had a prosperous season, the fish being both large and abundant. An unusual large number of salmon entered the river in November to spawn.

*Overseer Peter McEachan*, whose district is mainly composed of inland waters, reports that salmon and sea trout were abundant in the River Inhabitants and River Dennis, and that large numbers were taken for home consumption. Owing to reports



that the wardens on the above named streams had been taken away, attempts were made to violate the law, but special guardians were immediately employed, who rendered good service in protecting the numerous rivers of the district.

*Overseer Lewis McKeen* reports a falling off in the total value of fish taken in his district. This is mainly due to a scarcity of fish, but other minor causes also aided to produce this meagre result. At Mabou Harbour a public pier was built which drew from the fisheries a large number of boat fishermen between Mabou and Broad Cove. At the Coal Mines, so-called, people devote their time principally to farming, and many took to fishing only to obtain a supply for home consumption. As a result the fishery was prosecuted only to a limited extent. Only one lobster factory was in operation this year in this district and it had a successful season. At Whyecomagh, salmon is the largest and most valuable fishery, and this year's catch is in advance of previous years.

#### RICHMOND COUNTY.

*Overseer Duncan Cameron* reports a falling off in every branch of the fisheries of his division, except codfish and lobsters. The former shows an increase of about 500 quintals and the latter of 85,000 cans over the previous year's figures. Mackerel and herring did not strike in in such large numbers as before, which is the cause of a falling off in these branches. Overseer Cameron highly approves of the steps taken to protect the fisheries by means of special guardians. This system will offer greater protection to the lobster fishery particularly.

*Overseer Alfred Lenoir* reports the spring mackerel fishery a complete failure in his district. He finds it difficult to ascribe a cause for this state of things, unless it be the presence on the coast of large fields of drift ice which remained very late and may have directed the early run of mackerel off its course. During the summer a small run made its appearance, varying from seven to nine inches in length, a quantity of which was seined and canned. It is fortunate for this fishery that purse seining has been prohibited, as it has proved a most destructive method of capturing fish. The lobster fishery has assumed great proportions in this district as compared with other years. The number of factories on Isle Madame has increased from seven to eleven and the quantity of lobsters shipped this season reached 279,040 cans. Owing to the strict watch kept over the factories the regulations have been well observed during the season. As mackerel and herring were very scarce cod fishermen were at a loss for bait, clams being the only kind of bait used for a part of the season. The deep sea cod fishery was more successful than all other branches of the fishing industry, and in localities where this fishery was carried on the fishermen are in comparatively comfortable circumstances. The mid-summer run of herring was a failure; a good run, however, made their appearance in September. They were not quite so large or flat as usual, and commanded but poor prices. Under instructions from the inspector this overseer visited every part of his division, and gathered as accurate returns as possible, and the statistics which he furnished can be fully relied upon. He visited the rivers of his division regularly and the regulations were well enforced.

#### VICTORIA COUNTY.

*Overseer Wm. Bingham* reports a successful herring fishery during the past season and at the date of writing his report the winter herring were striking and affording an excellent bait supply to cod fishermen who had been unable to pursue the fall fishing regularly for want of bait. He reports the mackerel fishery a failure, scarcely any of these fish visiting the harbours and bays of his division during the year. The cod fishery proved very poor owing to a scarcity of bait and high winds. Fishermen became extremely uneasy and expected to pass a hard winter, but during the months of November and December this branch of the fishery improved and more than made up for the poor summer's catch. The result is an increase in the catch of cod over last year, and the fishermen of this division are well provisioned for the winter. The



squid fishery was fairly good at Englishtown Bay and Harbour and fishing vessels were quickly baited, although no fish trap exists at that place to aid fishermen in procuring this valuable bait. Squid sold at the rate of 25 cents per cwt. Salmon shows a falling off and Overseer Bingham recommends that the North River be stocked with fry from the hatchery located at Sydney. He also recommends that Clyburns Brook be stocked with salmon fry. Both rivers are well adapted for the propagation of fish. The lobster fishery shows an improvement in the average size but not in the quantity canned per factory. More men were engaged in this industry than last year, which accounts for the total increase in the catch, which would have been greater had it not been for the succession of severe storms which prevailed during the season. The heaviest storms, experienced between the 23rd and last of June, destroyed nearly all the fishermen's gear. Had it not been for the extension granted this fishery would have been a failure.

*Overseer Duncan McDonald* reports an increase in the catch of cod of 694 cwt. over last year's catch, and this increase would have been greater had not many of the fishermen been engaged during the first part of the season in lobster fishing. The shore fishermen complain greatly of fishing vessels trawling along the coast. This method of fishing is held to have a ruinous effect on shore cod fishing, and local fishermen would like a law prohibiting this mode of fishing at least close inshore. The best catches of cod were made during the month of October, and had it not been for the unusually blustering weather experienced a splendid season's catch would have been the result. Overseer McDonald reports a decrease of 200 barrels of mackerel in his division. The spring run was light and the rough weather experienced during September, joined to so few fish being taken in nets during the fall, caused the decrease in the catch. The only time during which mackerel appeared abundant in the bays was in September, but stormy weather prevented the success of this fishery. The herring fishery shows an average catch, and fishermen are of the opinion that lobster traps drive the fish away from the shore. Salmon returns also show an average catch. Salmon were abundant, but a succession of heavy storms during the month of June destroyed the nets and injured this fishery. The lobster fishery was good considering the late date at which the factories began operations and the stormy weather experienced in June, which destroyed the fishermen's gear. Overseer McDonald thinks the season under present regulations too short. Fishermen in his division could prosecute this fishery until the first of August without injury.

*Overseer Donald McQuarrie* reports an increase in the cod and oyster fisheries of his district over that of 1890. In mackerel, herring and alewives there is a slight decrease. The principal cause of the increase in cod is chiefly due to a larger number of men engaged in this fishery since the completion of the Cape Breton Railway. The Bras d'Or lakes were found well stocked with fish, and shipping fresh fish by rail to markets abroad will undoubtedly become an important feature of the fishing industry of Cape Breton in the near future. A smaller quantity of alewives were taken in this district this year for bait. The Middle River was not very well supplied with trout during the past season. This may have been caused by rafting of timber in the river. A large run of salmon ascended the Baddeck and Middle Rivers during the last part of October and November, and large numbers of fish were taken to supply spawn for the hatchery at Sydney.

I have the honour to be, Sir,

Your most obedient servant,

A. C. BERTRAM,

*Inspector of Fisheries for District No. 1, Nova Scotia.*

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DISTRICT No. 2.

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## ANNUAL REPORT ON THE FISHERIES OF DISTRICT No. 2 OF NOVA SCOTIA, COMPRISING THE COUNTIES OF CUMBERLAND, COLCHES-TER, PICTOU, ANTIGONISH, GUYSBOROUGH, HALIFAX AND HANTS, FOR THE YEAR 1891, BY INSPECTOR ROBT. HOCKIN.

PICTOU, 31st December, 1891.

Hon. CHARLES H. TUPPER,  
Minister of Marine and Fisheries,  
Ottawa.

SIR,—I have the honour to submit a report of the fisheries in district No. 2, Province of Nova Scotia, together with a synopsis of the reports of the local fishery overseers.

Appended hereto are tabulated returns giving the quantities and values of each kind of fish caught together with comparative tables showing the increase and decrease of the fisheries in each county, as well as the increase and decrease of each kind of fish. These returns have been compiled from the reports of local overseers and have been made up with unusual care from the individual report from each fishing establishment, even if that establishment was comprised of one fisherman who caught, cured and marketed his own fish.

One result has been to prove that the reports forwarded from year to year based upon quantities furnished by overseers to inspectors have been fairly reliable and only in a few cases has it been necessary to eliminate quantities returned without sufficient evidence of their being the catch of fishing establishments within the district. Another result has been to show that a system could be adopted whereby a reliable man in each settlement duly sworn would obtain from each establishment the yearly catch and forward to the overseers to be by them tabulated and forwarded to the Inspector. The information so obtained would be as nearly accurate as it is possible to secure and the element of uncertainty reduced to a minimum; and as these statistics supply the information upon which legislation is based, it is of first importance that it should be reliable. The cost of such a system would be very little, if any, in excess of the present.

The catch of fish for the year 1891 has been a good one in this district, being above the average of the past fifteen years. Considerable increase is shown in the yield of deep sea fish. Mackerel, notwithstanding that the schedule prices have been reduced one dollar per barrel, shows an increase of \$29,000, and if valued the same as last year the increase would have been \$52,000, or about 15 per cent. The cod family which includes haddock, hake and pollock shows an increase in the value of the catch of about 33 per cent., or \$106,810 over last year. Herring nominally shows a decrease but this is owing to the fact that it was a return of about 20,000 brls. from the City of Halifax were obtained by trading in Labrador and not the catch of our own fishing establishment. These have not been included in this year's returns, although it may be possible that no returns of these fish may reach you through any other source. This quantity deducted from last years catch for comparison, would show the value of this year's catch, taken at the same rate as last year, as \$41,649 in excess of last year or an increase of about 50 per cent.

## LOBSTERS.

The estimated value of fish of all kinds taken in this district during the past year is \$1,640,912. The estimated value of the catch of lobsters alone is \$533,647



or about 33 per cent of the whole; it exceeds by 20 per cent the value of the catch of all the cod family and products; and is 3 per cent in excess of the value of the combined catch of mackerel and herring.

Upon the Atlantic coast the catch has this year been about six per cent over that of last year, while on the Straits of Northumberland the increase has been thirty per cent over last year. This is partly due to the fact that the time for taking fish was extended from 15th July to 1st August. While the effect of this was to lengthen the season about twenty-five per cent it does not at all follow that it contributed in an equal degree to the increase of the catch for this year. During the first part of the season the fish were abundant and large, while during the latter part the catch was small and it did not pay the larger factories. Indeed the largest packers did not operate after 1st July, and among those who did I have found several express regret that the season had been extended, because the fish were not taken in sufficient quantities to pay an establishment of importance. One result of the extension, I believe, was that no sooner did the buyers in Europe find that the time had been extended than they took the alarm, expecting larger quantities to be put upon the market. Prices dropped and did not since regain their former place. The excellent prices obtained, and perhaps the increasing quantities taken during the past few years along the Straits of Northumberland, have led to the building of more factories and there will be ten new ones in operation in 1892 more than in 1891. This will probably lead to keen competition and the regulations affecting the size and berried lobsters may thus be endangered. The enforcement of these regulations as stated in previous reports can only be effected by a large outlay. Many of the factories are in out of the way places and on the approach of a cutter or a boat everything like violation of law is secreted until they are again out of sight, and I am of opinion that until factories are brought under a license system it is not possible to enforce these regulations in their entirety. The time has therefore arrived when the department, in the public interest, for the purpose of preserving this fishery, should prohibit all fishing without a license. It is a serious matter at all times to interfere with the business of the country unless some public injury is being done, and the returns from this fishery for the past year, as well as those of the two previous years, continue to show that where the close season is observed the fishing is not declining. This information we have from such a variety of sources that it dispels any suspicion that in the interest of those who fear restrictive legislation colourable reports are circulated, and until convinced that it is declining I do not consider that it would be judicious to bring into operation further restrictive legislation, the more so as the result of last season's fishing has put a strong argument in the mouths of those who claim that it is unnecessary. Of the violations to be grappled with, the non-observance of the close season upon a part of the coast is the most important. It is claimed the necessity for this restrictive regulation lies in the fact that the history of the fishery in countries where indiscriminate fishing was permitted has been one of rapid extinction. It is further claimed that the fish taken in the fall of the year are watery and lack the flavour of those taken in the spring months; that they contain an alkali which first blackens the can and then the fish, and that the placing of such goods upon the market is pernicious and injurious to the whole business because the consumer obtaining inferior fish discredits all canned lobsters. It is also claimed that in the fall three fish will not equal two of them if left till spring.

Now, there is hardly one of these arguments which is not combatted by fishermen who are always ready to bring forth any excuse to support them in violating the law, but some of these seem to believe it and get up a sympathy among their neighbours which makes the enforcement of the law a matter of greater difficulty.

What I wish to point out is that all of these points have some important bearing on legislation, and the department should have a more solid basis than mere rumours or assertions. All these points should be made the subject of accurate official investigation; a test of the fish should be made, for size, weight and quality, at different seasons, and a careful analysis made in spring and fall. Again it would



aid much in educating those interested if a paper, giving the history of the fishery in other countries, supported by statistics, together with the natural history of the fish, were drawn up and printed for distribution, and the tests mentioned above could be included. If such a paper was freely circulated among the fishing settlements, it would take away the moral support which violators have in evading the law.

SALMON.

The returns show a decrease in value of salmon; this is caused by the elimination of a quantity of pickled fish, obtained in Labrador, and not caught by our own fishing establishments. Of those caught in our own waters, there is an increase in value of about four per cent over last year. The counties of Guysborough and Halifax show an increase of about fifty per cent; the Bay of Fundy counties, an increase of about twenty-five per cent; while on the Straits of Northumberland the decrease in yield is twenty-seven per cent. During the spawning season the reports from the overseer were that a greater number of salmon were seen in the rivers than for many years before.

ALEWIVES.

The catch of alewives has been about ten per cent less than last year, that of smelts very nearly the same.

SHAD.

There have been taken this year about fifty per cent more shad than last year or 1,178 brls. in 1891 as compared with 790 in 1890, 534 in 1889 and 447 in 1888. This is the largest catch since 1886; previous to that year the catch was never less than two thousand barrels, and as many as eight thousand barrels are reported to have been taken in one year in this district. No satisfactory reason has been adduced for this decline, and I do not think it an easy matter to account for the increase of the catch in 1891 over that of 1890; but there can be no doubt that the killing of gravid fish which ascended the Shubenacadie River, in Hants County, for the purpose of spawning must have largely contributed to deplete the fishery.

The following is the reported catch of shad upon this river since 1884:

Year.	Barrels.
1884. ....	68
1885. ....	8
1886. ....	12
1887. ....	10
1888. ....	96
1889. ....	136
1890. ....	155
1891. ....	19

The nineteen barrels taken in 1891, were caught by thirty-four fishermen in quantities from one fourth of a barrel to two barrels each.

The question of affording protection to the shad fishery is one which has engaged the attention of the department for some time. While there may be great difficulties in framing a general law applicable to the various modes of fishing which will not bear unduly hard upon some localities, a local regulation extending the close season from Friday evening at sunset till Monday morning at sunrise, is required upon the Shubenacadie, which is the only river frequented by these fish in this district. So that it would begin upon Wednesday evening at sunset to Monday morning at sunrise—this would only allow fish to be taken two nights of the week, but as it would permit the inhabitants of the river bank to participate in the beneficial results likely to flow from the preservation of this fishery it would make the enforce-

ment of the law practicable ; for to shut down entirely upon fishing in the river will bring about a resistance, and that based upon established rights which under our free institutions, will be most likely to prevail.

#### WHITEFISH.

I find in a report of overseer Rowlings that at Cow Bay and West Chezetcook, in the County of Halifax, there were taken in one case three and in the other four barrels of "whitefish." Now while there are numerous species classed under the generic name of whitefish, still as the department have caused a number of *coregoni* to be placed in the inland lakes of Nova Scotia; and as a few of these are subject to periodical migrations, it would seem to be worthy of investigation whether these fish may or may not be the lacustrine species, the fry of which have been deposited in the inland waters for a number of years.

#### FISHWAYS.

In last year's report I called attention to the fact that of twenty-seven rivers flowing into the straits of Northumberland only four were unobstructed by mill-dams and that apparently, the salmon fishery was supported almost entirely by the fry from the hatchery—that nevertheless there was a decline in the fishery and one of the oldest overseers John McDonald, of Artigonish, says this has been continuous since 1887. I have since received instructions to cause fishways to be built in all the important streams in the district, and it is hoped many of these will be completed during the present year. The time when these can be built at less cost is during the summer months; about ten weeks of the year.

During the past year an opportunity has been afforded of testing the form of fishway invented by me—a description of which was given in my last year's report. Mr. A. B. Wilmot, of the Bedford Hatchery, under instructions from the department having placed a trap at the upper end into which no fish could get save through the fishway, and in this trap there were found three salmon and a number of trout.

I desire to call attention to the fact that this occurred during the month of May, at a time of the year when salmon are not by any means so venturesome as they are during the spawning season. This test disposes entirely of the objection raised by some that salmon will not enter a small aperture and demonstrates beyond all doubt that this form is an efficient fishpass, the cheapness, efficiency and durability of which, places it far ahead of all competitors. Further experiments have proved that fishways can be constructed on an incline of one foot in two. This is of great importance, as it lessens the cost probably fifty per cent.

While notices have been issued for the construction of a number of fishways, these could not be built at the time of the year when ordered by the inspector; and only four have been constructed in my district. But under instructions from your department, I prescribed this form for a number of dams on the Chateauguay River, River Beaudet, River au Raisin, River Delisle and Ottawa, in the Province of Quebec.

I may say that several of the Commissioners of Fisheries in the United States have asked and obtained permission to build trial fishways, and at the request of the Fishery Board of Scotland, a working model has been forwarded to Edinburgh.

#### SPECIAL GUARDIANS.

In those counties of this district where the office of Fishery Warden has been abolished and special guardians engaged for limited periods, the results have been most satisfactory and your department has wisely decided to extend the system. To supply the necessary information as to the wants of the different localities, the kind of fish frequenting the rivers, &c., and the parts of the river requiring most



protection, the dates when fish enter the rivers, which vary considerably, has involved much time and travel. This however, I trust, will not be without good results.

TRAP NETS.

There has been some agitation against trap nets, and the department has been petitioned to prohibit their use on the plea that they are as injurious as purse seines. These traps are generally set in coves and harbours, the bowl being from fifty to one hundred fathoms from the shore, with a leader set from shore to bowl. Whatever may be said of these fishing apparatus in some localities, there is no doubt that they are an important adjunct of the fisheries and their prohibition would work a serious injury to bank fishermen. For instance, take Chedabucto Bay, these traps form the bases of supply for baiting bank fishing schooners. Squid frequently strike there and are taken in these traps in quantities which could be obtained in no other way. Nevertheless, even last summer, schooners had to wait seven weeks for a single baiting and without the traps it is impossible to imagine how they could have secured bait at all. Set so near the shore, deep sea fish are not frequently taken in the traps, and it is impossible they could break up schools as purse seines do.

FROZEN BAIT.

In connection with trap nets which should form a basis of supply for freezers, I am informed that a firm in Canso, that of Messrs. A. N. Whitman & Son—at the suggestion, I understand, of Capt. A. Gordon, of the Dominion Steamer “Acadia” built a refrigerator for keeping bait, a supply of which was obtained from the trap nets. For the first time in the history of the fishery, fresh bait could be obtained in January, and fishermen could be seen starting off with a thin cake of ice containing enough squid bait for one day’s codfishing, and the results have been most satisfactory. In one day 33,000 lbs. of cod and haddock were landed in Canso. Two men in one boat took, in one day, \$30 worth of fish, and this fishing continued till the supply of bait was exhausted. This unprecedented state of things was entirely due to the freezer which could not have been utilized without the trap nets.

Overseer Cameron, of Guysboro, who is my informant, believes that this industry will assume large proportions if trap net fishing is not over restricted. The work in connection with this office has involved travel during the year as follows:—

By railway.....	8,850 miles
“ highway.....	2,037 “
“ steamer.....	200 “

Total.....11,087

And besides preparation of reports and statistics, correspondence covering 1,150 pages of the letter book.

SYNOPSIS OF OVERSEERS’ REPORTS.

ANTIGONISH COUNTY.

Overseer John McDonald states several fishermen in this county had their boats and fishing gear destroyed during the storm of December, 1890, and as fewer men were engaged fishing the catch and value fall short of previous years. The lobster fishery, however, seems to hold its own. This is considered an evidence that fishermen and packers are doing justice to the fishery.

There was a decrease in the catch of salmon nearly every year since 1887. Mackerel were scarce although quite a number were caught off Pomquet Island by fishermen from Canso with large boats well supplied with nets. Hake were abun-



dant, but bait could not be had at the proper time. If the fishermen had a larger class of boats they would be able to make better catches. Cod were scarce, a few good hawls were made in the fall. Herring during the early part of the year were quite numerous, but of poor quality. There was about an average catch of eels, smelt, trout and other inland fish. During the year this overseer visited most of the Fishery Wardens in his division and they had no violations of law or regulations to report, except Warden Randall who found a salmon net set in the river near his place which he destroyed. Notices of the fishery laws and regulations were posted in the lobster factories, and as far as the overseer could ascertain, the parties kept within the law.

## COLCHESTER COUNTY.

*Overseer H. Gass* has every reason to believe that poaching was carried on upon Waugh's River previous to the appointment of a special guardian; but after his appointment, a number who attempted it, finding the guardian on the river every night, gave it up. Herring were very scarce; people setting a hundred fathoms of net did not get a fish. Smelts proved a failure two years ago and very few people fished for them last year. Mackerel did not enter the bay.

*Overseer R. J. Pollock* reports that the Guy's River is completely blocked by a mill dam in which there is no pass. This is quite a large stream with Lake Egmont at the head, and if supplied with a fishway, the overseer has no doubt that salmon would be abundant, as these fish come up as far as the mill. In the Lower Stewiacke salmon appeared to be plenty in the fall. These fish ascend about eight miles above the Upper Stewiacke village; they come into the river about 10th June.

*Overseer J. W. Davison* reports an increase in the catch of shad of about 25 per cent over the previous year, and states that fishermen are looking hopefully for shad to return in sufficient numbers to make the business profitable as they seem to be increasing slowly. Steps should be taken to protect these fish during the spawning season, otherwise no increase can be expected. He recommends a close season during the whole time of spawning. Those who now fish for shad in the rivers have better outfits than formerly and catch more fish in consequence of the increase of shad in the bay. Quite a number of disputes arose regarding weirs, many having neglected to occupy places, lines had become obsolete, and the overseer was called upon several times to settle disputes. The use of dynamite, which is most destructive to fish, has been in vogue of late years. River guardians should be provided with dark lanterns to enable them to identify offenders. There are no fish ladders in the dams of this district and the overseer hopes next year to report they have been supplied.

## CUMBERLAND COUNTY.

*Overseer William Murphy* reports that lobster canning began on the 12th May, and from that date until the 15th June, the yield was excellent both in size and number. There was a falling off after that date, and scarcity of bait caused some loss. Cannors all expressed themselves against the extension of the season. Smelts were more abundant than they have been since fishing with bag nets began. This is attributed to the fact that the river froze early thus enabling fishermen to take fish which at a later date go back to the sea. Alewives were plenty. A new crop of oysters is just coming to size for fishing, and the catch shows a large increase. If small oysters were returned to the water instead of being left on the ice to freeze, it would aid much in keeping up the supply. The herring fishery was a complete failure, only about 100 barrels being taken instead of 700 barrels as last year. Salmon were abundant during the fall. Taking everything into consideration this has been a good year for those engaged in fishing.

*Overseer George Gilroy* reports that the same effort was not put forth last year to catch fish which appeared to be as abundant as before, but the quantity reported as caught is less. A new fishway (Hockin) was put in the dam at Ross Mill, Oxford,

on the River Philip. Salmon have been seen above the dam since the fish-way was built, but these fish may have got over the dam at the time of a freshet. The other fish-ways are out of repair and he thinks new ones had better be built, as the cost would be less than to repair the old ones. Special guardians were only required a few nights, very few poachers being seen.

## GUYSBOROUGH COUNTY.

*Overseer William Cameron* reports a good run of salmon, but an easterly storm which lasted about a week rolled up the nets and prevented fishing. Fish of all kinds were scarce in Chedabucto Bay until fall mackerel set in, of which there was a fair catch. These were exported fresh on ice and good prices realized. This run of mackerel was a surprise; otherwise more would have been taken. But among old fishermen it is believed that these fish follow the same course several years in succession. Squid were exceedingly scarce, very few of the traps, and those in good berths, doing well. Some vessels of the Lunenburg fishing fleet waited seven weeks for a single baiting. Codfish were abundant at Canso. Fishermen there have excellent facilities for securing bait, first from the numerous traps in the locality and then from A. N. Whitman & Son, who keep on hand a supply of frozen bait. At Torbay the catch of codfish was fair and that of haddock and herring large. Herring appeared in such numbers that the nets were sunk and in some cases were torn from the head ropes by the weight of fish. This however lasted only for a night or two. Scarcely any fishing was done at New Harbour after the month of August for the want of a breakwater. The entrance to this harbour is closed by a bar; but if a breakwater was built from a point of rocks just outside it would make a good harbour.

*Overseer Allan McQuarrie* reports the catch good in staple fish, as his returns, which have been made up with great care, will show. The fishery which demands the most attention is the lobster fishery, and he is of opinion that in his district a close season from 1st July to 15th October would save the fishery.

It is reported that a large lumbering firm are about to build several dams on the St. Mary's River and tributaries, which should be supplied with fish-ways.

## HALIFAX COUNTY.

*Overseer George Rowlings* reports the catch as an average one, except in herring and mackerel. Very few July herring were taken, and there was the smallest catch of fall mackerel seen for years. Cod were abundant, but during the month of October the weather was so stormy that fishermen could do nothing. The catch of lobsters was good and fair prices were obtained.

## HANTS COUNTY.

*Overseer J. B. Colter* reports that fewer fish have been taken than for a number of years. The water kept high in the Shubenacadie River. Very few bass or salmon were caught, and it is probable that a greater number than usual reached Grand Lake. Fish were so scarce that not more than three-fourths of the average number of men were engaged fishing.

## PICTOU COUNTY.

*Overseer Robert Sutherland* reports that this has been a fairly prosperous season. The catch of lobsters was unusually large, and good sized fish were taken during the first part of the season, but they fell off earlier than usual, so that the quantity secured by some establishments was less than that of last year. Lobster fishing is the principal fishery of this division, only a few deep-sea fish being caught for home consumption. The attention of the department is called to the cultivation of oysters, which in this division could be done at small cost and would repay the outlay. Salmon fry should be planted in Carriboo and River John, and in Toney River, after a fish-way is built.

*Overseer A. O. Pritchard* reports the quantity of fish taken in his division as small, and his duties are largely of a protective character. Salmon do not enter the rivers of this division until late in the fall, when they cannot be legally taken. Poachers have been active this year, but as quite a number were caught and fined it will have a good effect. They had probably presumed that because the guardian, who had been on the river for some years, had removed, they could violate the law with impunity, but this presumption cost some of them dearly.

*Overseer John D. McQueen* reports having fined several people for violation of the salmon regulations.

*Overseer McPhie* reports the catch of salmon as very small, a heavy easterly storm having torn and destroyed many of the nets; but a good number were seen in the fall in the rivers. About forty salmon were taken in French River for the Bedford hatchery.

I have the honour to be, Sir,

Your obedient servant,

ROBERT HOCKIN,

*Inspector of Fisheries, District No. 2, Nova Scotia.*



## DISTRICT No. 3.

ANNUAL REPORT ON THE FISHERIES OF DISTRICT No. 3 OF NOVA SCOTIA, COMPRISING THE COUNTIES OF KING'S, ANNAPOLIS, DIGBY, YARMOUTH, SHELBURNE, QUEEN'S AND LUNENBURG, FOR 1891, BY INSPECTOR J. R. KINNEY.

YARMOUTH, N.S., 31st December, 1891.

HON. CHARLES H. TUPPER,  
Minister of Marine and Fisheries,  
Ottawa.

SIR,—I have the honour to transmit the fishery statistics of this district for the year now ended, and I am pleased to report an increase in the total product of upwards of \$600,000, such increase being made up as follows :—

Counties.	Increase.	Decrease.
Annapolis.....	120,910 80	
Digby.....		40,345 20
King's.....	41,899 00	
Lunenburg.....	165,195 05	
Queen's.....	35,469 70	
Shelburne.....	65,667 80	
Yarmouth.....	289,470 26	
	651,158 11	40,345 20
	• 40,345 20	
Net increase .....	610,812 91	

The reports show a slight decrease of 1,780 tons of shipping engaged in the deep-sea fisheries. This is largely due to the fact that three or four Lunenburg schooners have transferred their operations to British Columbia.

## SALMON.

The yield of this fish shows an increase of 77,000 lbs., nearly one half of which is credited to the County of King's. Shelburne and Yarmouth show respectively increased catches of 11,000 lbs. and 15,000 lbs. On the Clyde River, where the dam was demolished in 1890, no appreciable addition to the catch is yet reported; the ultimate good results from the disappearance of this obstruction cannot, of course, be expected for at least two years.

## HERRING.

The increased yield of herring aggregates upwards of 20,000 brls. This increase took place in the face of the repeated assertion that lobster traps with their stinking bait were the cause of the former decline in this industry. This coincides with the opinion expressed in my last annual report, "that all the lobster pots in Nova Scotia could not pollute one square mile of the Atlantic Ocean."

Annapolis Basin yielded 6,020 boxes of smoked herrings in 1890; the same locality in 1891 gives an excess of 14,000 boxes. And yet it is from this locality

that the loudest complaints against lobster pots were heard. This is fairly presumptive evidence that the grievances of the herring fishermen are more imaginary than real.

#### ALEWIVES.

This fish provides a valuable bait for the shore cod fishermen; hence its early appearance is anxiously looked for. The past year's take was somewhat in excess of that of 1890.

#### MACKEREL.

These fish have wonderfully helped to swell the total value of the past year's products, as, notwithstanding the falling off in price, the increased total value amounts to \$326,000, and the excess in the catch to 24,000 brls. Nearly fifty per cent of this is shown to be from localities where it has been urged that the deadly lobster bait was ruining the net fisheries.

#### LOBSTERS.

This important industry deserves more than a passing observation. The counties of Digby, Yarmouth and Shelburne are so geographically situated that the United States market for live lobsters is within a few hours' reach; hence the change in the regulations which permits of lobster fishing beginning with the year proved a most valuable concession. There were exported from the above-named counties alone for the three months ending 30th March—at which date other districts have hardly commenced their fishing—upwards of \$20,000 worth of lobsters. The actual output for the past year exceeds that of the previous year by 478 tons exported alive, and of preserved lobsters 340,000 cans, both items representing an increased value of \$66,000.

The regulations were observed where the business of the buyer and packer was conducted near a fishery officer. I would again urge the most stringent regulations to secure compulsory honesty on the part of the packer.

#### CODFISH.

The total catch of cod fell short of that of the previous year by about 15,000 cwt. This falling off was largely due to the trouble of procuring bait in Newfoundland.

I enclose extracts from the reports of the several fishery overseers, to which I would respectfully call your attention.

#### ANNAPOLIS COUNTY.

*Overseer W. M. Bailey* considers that the increased catch of salmon is due to the fact that the dam at Lawrencetown was carried away some years ago. The demand for alewives to be used as cod bait induced some fishermen to devote themselves with more energy to this fishery.

#### DIGBY COUNTY.

*Overseer James A. Collins* reports that the unprecedented scarcity of bait at home compelled fishermen to import alewives from New Brunswick at ruinous prices. This reduced the net earnings to a very great extent. He claims that the line fishermen attribute this scarcity of bait to the obnoxious lobster traps.

#### KING'S COUNTY.

*Overseer James S. Miller* reports that the creeks and harbours of his division swarmed with small mackerel, and that the increased catch of shad is an encouraging feature. He also states that the net fisherman complains of the lobster pots.

*Overseer R. F. Reid* reports that the alewives fishermen did well, and that large numbers of the young fish pass down the Gasperaux River during the fall. No violations of the laws came to this overseer's notice.

## LUNENBURG COUNTY.

*Overseer David Evans* believes that the increased quantity of salmon caught is not an evidence of their increase, but that it simply shows that the fishermen devote themselves to this fishery with more energy. He considers that the use of trap-nets makes the mackerel fishery a surer success than it otherwise would be.

*Overseer W. M. Solomon* reports that the falling off in the take of bank fish is due to the difficulty of procuring Newfoundland bait. The outlook for the Labrador fishery is encouraging. He says that the increased catch of mackerel is due to the trap-net fishing, and observes that this was a fortunate thing for the cod fishermen, as the mackerel furnished bait, and leaves with the local fishermen considerable sums of money.

## QUEEN'S COUNTY.

*Overseer Thomas Day* reports that young salmon have been more abundant than usual in the upper waters of Liverpool River. He suggests an extension of the weekly close time.

*Overseer John Fitzgerald* observes that the only fish of his division which shows a falling off is the cod, and that was due to the fact that fewer vessels engaged in this industry. He believes the regulations to have been well observed, and to this he attributes the fact that the salmon and alewives fisheries show signs of improvement.

He urges an increase in the weekly close time on the Medway River.

## SHELburne COUNTY.

*Overseer E. S. Goudey* reports a comparative failure in the inshore cod fishery, owing to the scarcity of bait. The lobster fishermen had a successful year's work, and extensive preparations are being made for the prosecution of the industry next year.

*Overseer W. J. McGill* states that the good catch of alewives was most opportune, coming, as it did, when other bait was scarce. This officer attaches great importance to the clearing out of obstructions in streams leading to the spawning grounds of alewives. The comparative failure of the shore fisheries is to be attributed to want of bait. There was an unprecedented take of salmon on Jordan River. The close seasons were well observed.

## YARMOUTH COUNTY.

*Overseer John A. Hatfield* reports that the salmon fishery, which has been falling off for several years, shows a large increase over the catch of last year. The fishermen attribute this to the planting of salmon hatched in the temporary hatchery in the headwaters of Tusket River. Although the catch of alewives shows a slight falling off, the increased value received by the fishermen more than makes up for the reduced quantity.

I have the honour to be, Sir,  
Your obedient servant,

J. R. KINNEY,  
*Inspector of Fisheries, District No. 3, Nova Scotia.*



NOVA SCOTIA—

RETURN showing the Number, Tonnage and Value of Vessels and Boats engaged in and the Total Number of Men Employed, &c., in the

DISTRICT.	VESSELS AND BOATS EMPLOYED IN FISHING.						FISHING MATERIAL.							
	Vessels.				Boats.		Nets.		Salmon, barrels.	Salmon, fresh, in ice, lbs.	Salmon, smoked, lbs.	Salmon, in cans, lbs.	Mackerel, barrels.	
	No.	Tonnage.	Value.	Men.	No.	Value.	Men.	Fathoms.						Value.
<i>Cape Breton County.</i>			\$			\$		\$						
From Albert Bridge to False Bay Beach.....					23	272	25	2200	550	..	3530			4
From False Bay Beach to Long Beach.....					59	1196	74	6340	1866	..	1120			75
From Long Beach to Big and Little Glace Bay and Bridgeport.....					24	318	37	1480	473	..				4
From Lingan to South Bar and south side Sydney River.....					73	1168	109	5680	1863	..	2550			20
From Sydney to N. W. Arm, Point Edward, Coxheath and Sydney Forks River, Salmon River and Grand Lake.....					23	264	50	1960	394	..	1000			
Gabarous.....	1	13	370	6	111	3900	195	6600	3300	..				87
N. shore and Kennington Cove..					22	280	44	1220	610	..				20
Louisburg.....					48	1850	123	5200	2600	..	700	960		40
Big Lorraine.....					35	1750	95	3200	1600	..				35
Little Lorraine.....					22	1100	60	3000	1500	..				30
Lewis Bay and Grand Mira.....					16	160	20	800	300	..	400	50		
Big Pond and East Bay.....					20	600	30	600	300	..				
North side East Bay and Eskasoni.....					27	280	41	910	450	..				2
Benacadie and Grand Narrows..					48	550	96	1100	480	..	140			10
Christmas Island to George's River.....					20	280	38	750	375	..				
Little Bras d'Or to Lloyd's Cove	6	117	1500	28	68	1200	137	3590	1300	..	1800			42
North Sydney to Ball's Creek...	1	18	400	4	56	1100	162	2840	1200	..				55
Main-a-Dieu.....					48	2880	118	5600	2800	6		4000		110
Mira Bay.....					37	1500	85	5800	2900	4	3000			28
Scattarie.....					16	1280	45	3200	1600	4				15
Bauline.....					15	450	30	1020	510	..		600		15
Totals.....	8	148	2270	38	811	22378	1614	63090	26971	14	14240	50	5560	592

## DISTRICT No. 1.

the Fisheries, Quantity and Value of Fishing Material, Kinds and Quantities of Fish, Province of Nova Scotia, for the Year 1891.

KINDS OF FISH.															FISH PRODUCTS.			VALUE.
Herring, barrels.	Herring, smoked, in boxes.	Alewives, barrels.	Cod, cwt.	Hake and Pollock, cwt.	Haddock, cwt.	Halibut, lbs.	Shad, barrels.	Bass, lbs.	Trout, lbs.	Squid, barrels.	Smelt, lbs.	Eels, barrels.	Oysters, barrels.	Lobsters, cans.	Fish Oil, gallons.	Fish Guano, tons.	Fish used as Bait, barrels.	
80	....	40	80	10	6	.....	2	....	800	....	2000	10	4	.....	40	2	20	\$ cts.
1133	....	4	1073	..	96	5200	..	....	300	....	1500	50	....	30042	536	50	268	2,121 00
119	....	12	136	..	15	2000	..	....	1200	....	1500	20	....	.....	68	3	34	18,752 28
600	....	2	536	..	50	4800	..	....	400	....	2500	20	....	22822	268	20	134	2,058 20
																		10,934 28
209	100	109	5	....	....	....	....	....	2400	....	8900	35	....	....	....	....	....	2,713 50
796	....	....	2320	....	355	....	....	....	20	....	....	....	....	129840	1050	....	260	35,472 10
168	....	....	456	....	72	....	....	....	....	....	....	....	....	....	220	....	60	3,518 00
650	....	10	1340	....	350	....	....	....	....	....	....	....	....	31200	840	....	150	15,998 00
900	....	5	1200	....	300	....	....	....	50	....	....	....	....	....	650	....	140	11,487 50
400	....	....	600	....	200	....	....	....	....	....	....	....	....	....	400	....	100	5,930 00
		12	....	....	....	....	4	200	100	....	2000	....	....	....	....	....	....	306 00
90	....	10	40	....	....	....	....	....	100	....	200	35	3	....	40	....	....	1,025 00
250	....	4	400	....	....	....	....	....	800	....	800	39	....	....	200	....	34	3,612 00
400	....	10	400	....	60	....	....	....	350	....	1000	10	5	....	200	....	50	4,378 00
25	....	....	160	....	....	....	....	....	300	....	400	5	....	....	50	....	15	975 00
395	....	15	2700	....	275	3200	....	....	400	....	300	32	....	40000	850	....	250	22,915 50
625	....	....	1020	....	60	1000	....	....	....	....	2000	10	....	....	290	....	110	8,963 50
400	....	5	1800	....	250	1000	....	....	....	....	....	6	....	32160	1050	....	180	18,417 90
720	....	10	1200	....	185	800	....	....	6	1200	3	....	....	....	650	....	150	11,067 50
120	....	....	1640	....	60	500	....	....	7	....	....	....	....	15360	570	....	86	10,989 40
120	....	....	400	....	90	400	....	....	2	....	....	3	....	10000	200	....	50	4,588 00
8200	100	248	17506	10	2424	18900	6	200	7220	23	24300	278	12	311424	8172	75	2091	196,222 66

## RETURN showing the Number, Tonnage and Value of Vessels and Boats engaged in

DISTRICT.	VESSELS AND BOATS EMPLOYED IN FISHING.						FISHING MATERIAL.		Salmon, fresh, in ice, lbs.	Salmon, in cans, lbs.	Mackerel, barrels.	Mackerel, in cans.	Herring, barrels.	
	Vessels.				Boats.		Nets.							
	No.	Tonnage.	Value.	Men.	No.	Value.	Men.	Fathoms.						Value.
<i>Inverness County.</i>			£			£			£					
Port Hood.....	1	26	400	4	102	2500	280	16800	5600	300	80	840		
Little Mabou.....					16	160	42	1600	620		8	90		
Sea Side.....					18	270	68	4500	1400		25	250		
Little Judique.....					34	440	102	4800	1800		15	2200		
Judique.....					42	420	105	5000	1900		21	700		
Long Point.....					22	300	51	2200	800	1500	20	450		
Creignish.....					18	180	25	800	440	1200	22	150		
Low Point.....					25	250	40	1000	450		25	250		
Port Hastings.....	2	47	1200	11	31	465	51	2480	1240		12	372		
Port Hawkesbury.....	3	180	3600	35	35	875	70	1800	880		871	620		
Mabou Harbour.....					5	100	15	288	120	200	5	20		
Coal Mines.....					6	120	12	144	50	800	7	8		
Port Bain.....					8	160	24	575	195		15	20		
Marsh Point.....					17	340	51	1200	400	360	60	100		
Whycocomagh.....					7	98	14	144	50	4000				
West Bay.....					17	255	36	800	450			1000		
North Mountains.....					40	600	90	5000	2000		40	700		
Malagawatch.....					42	630	95	3000	1000		20	200		
Boom.....					30	450	65	2200	800			120		
Basin, River Dennis.....					14	210	35	600	200			100		
River Inhabitants.....					4	48	8	300	125					
S. S. Whycocomagh..					7	100	20	700	290			50		
River Dennis.....					5	75	10	200	80					
Orangedale.....					22	330	50	1440	300			60		
Seal Cove.....					6	90	12	360	137			30		
Delaney's Cove.....					7	175	21	875	284		21	42		
Doucett's Cove.....					6	210	18	690	197	496	30	40		
East Margaree.....	5	94	2805	31	27	1432	92	4560	3720	762	48	394		
West Margaree.....	1	26	950	6	6	212	21	1980	1470	31546	32	140		
Margaree River.....										490				
Margaree Forks.....										1268		12		
Margaree Island.....					22	612	51	1540	396		380	338		
Broad Cove Marsh.....					8	240	22	560	132		63	94		
Port Bain.....					5	150	11	420	138		12	86		
Broad Cove Shore.....					10	230	20	690	294		20	112		
Coal Mines and Whale Cove					4	78	8	280	240		8	18		
Lake Outlet and Loch Bain														
Trout Brook and East Lake														
Pleasant Bay.....					25	500	65	2000	1100		4000	375	200	20
Cape Rouge & E. Harbour..	4	69	1950	25	97	9700	356	4000	2000	8000	325			
Cheticamp Point.....					45	3000	135	400	400	2000	105			
Grand Etang.....					24	2000	74	2400	1200	4000	350	200		
Friar's Head.....					20	1600	60	2000	1000		200	150		
N. E. Margaree.....										500				
	16	442	10905	112	879	29605	2325	79926	33898	57422	4000	3215	200	9976



the Fisheries, Quantity and Value of Fishing Material, &c.—Nova Scotia—Con.

KINDS OF FISH.												FISH PRODUCTS.				VALUE.	
Alewives, barrels.	Cod, cwt.	Cod Tongues and Sounds, barrels.	Hake and Pollock, cwt.	Hake Sounds, lbs.	Haddock, cwt.	Halibut, lbs.	Trout, lbs.	Squid, barrels.	Smelt, lbs.	Eels, barrels.	Oysters, barrels.	Lobsters, cans.	Fish Oil, gallons.	Fish Guano, tons.	Fish used as Bait, barrels.		
.....	2400	.....	1200	1800	600	.....	500	240	2000	32	.....	67803	2500	.....	600	.....	35,632 42
.....	160	.....	60	240	48	.....	100	20	500	.....	.....	.....	80	.....	30	.....	1,957 00
.....	240	.....	160	400	80	.....	100	40	300	.....	.....	51682	500	.....	150	.....	11,460 48
.....	200	.....	80	100	40	.....	800	30	1800	45	.....	.....	120	.....	120	.....	12,433 00
.....	140	.....	.....	.....	20	.....	2500	10	.....	20	.....	40574	80	.....	250	.....	10,721 36
.....	160	.....	20	.....	40	.....	1000	.....	.....	12	.....	8255	10	.....	100	.....	5,054 70
.....	50	.....	.....	.....	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	20	.....	1,530 50
25	100	.....	.....	.....	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	40	.....	2,055 00
5	500	.....	.....	.....	200	.....	100	20	2500	35	.....	.....	30	.....	170	.....	5,736 50
.....	230	.....	.....	.....	60	.....	500	50	1000	.....	.....	.....	1600	.....	230	.....	17,536 50
.....	50	.....	.....	.....	12	.....	.....	.....	2000	10	10	10709	30	.....	30	.....	2,253 26
.....	60	.....	.....	.....	14	.....	.....	.....	2400	.....	.....	13758	35	.....	24	.....	2,739 12
.....	80	.....	.....	.....	15	.....	.....	.....	4000	.....	.....	.....	35	.....	50	.....	1,024 50
10	160	.....	.....	.....	40	.....	.....	.....	2000	.....	.....	12144	100	.....	20	.....	4,137 16
.....	75	.....	.....	.....	.....	.....	1000	.....	2000	20	60	.....	35	.....	5	.....	1,739 00
.....	80	.....	.....	.....	.....	.....	3000	.....	2300	45	400	.....	45	75	50	70	8,938 00
20	1340	20	.....	.....	5	.....	2000	40	4000	70	.....	.....	400	.....	160	400	11,907 50
.....	400	10	.....	.....	8	.....	3000	10	5000	80	400	.....	100	.....	150	200	6,063 00
.....	320	9	.....	.....	.....	.....	2000	.....	3000	50	200	.....	90	.....	120	150	3,811 00
.....	300	8	.....	.....	.....	.....	4000	.....	5000	100	300	.....	70	.....	100	80	4,648 00
.....	.....	.....	.....	.....	.....	.....	6000	.....	4000	70	.....	.....	.....	.....	.....	.....	1,500 00
20	260	5	.....	.....	.....	.....	2000	.....	4000	50	.....	.....	.....	.....	10	5	2,452 50
25	.....	.....	.....	.....	.....	.....	7000	.....	8000	60	20	.....	.....	.....	.....	.....	1,872 50
.....	50	2	.....	.....	.....	.....	.....	.....	10	500	.....	.....	.....	.....	10	20	2,140 00
.....	30	1	.....	.....	.....	.....	1000	.....	.....	10	10	.....	.....	.....	5	10	522 50
.....	412	.....	.....	.....	32	.....	.....	18	.....	.....	.....	.....	40	.....	26	.....	2,576 00
.....	318	.....	.....	.....	28	.....	.....	12	.....	.....	.....	.....	100	.....	21	.....	2,347 70
46	2098	.....	.....	.....	202	648	640	42	.....	12	.....	.....	526	.....	92	.....	13,717 60
132	1204	.....	24	60	154	.....	280	34	.....	5	.....	.....	1234	.....	84	.....	14,888 80
465	.....	.....	.....	.....	.....	.....	1490	.....	.....	8	.....	.....	.....	.....	.....	.....	2,419 50
122	.....	.....	.....	.....	.....	.....	430	.....	.....	.....	.....	.....	186	.....	.....	.....	974 00
.....	216	.....	18	.....	46	976	.....	90	.....	.....	.....	.....	158	.....	117	.....	8,724 30
21	134	.....	.....	.....	28	.....	.....	21	.....	.....	.....	13608	46	.....	43	.....	4,172 52
.....	103	.....	.....	.....	26	.....	.....	10	.....	.....	.....	.....	31	.....	16	.....	1,185 90
19	75	.....	.....	.....	31	.....	.....	15	.....	.....	.....	.....	96	.....	25	.....	1,451 40
.....	67	.....	.....	.....	8	.....	.....	6	.....	.....	.....	6144	14	.....	29	.....	1,455 76
93	.....	.....	.....	.....	.....	.....	800	.....	.....	16	.....	.....	.....	.....	.....	.....	658 50
.....	.....	.....	.....	.....	.....	.....	16700	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,670 00
.....	200	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20000	160	.....	300	.....	10,154 00
.....	8000	.....	.....	30	200	.....	.....	500	.....	.....	.....	31000	4000	.....	525	.....	51,600 00
.....	4000	.....	.....	.....	200	.....	.....	250	.....	.....	.....	.....	1500	.....	300	.....	22,620 00
.....	4500	.....	.....	.....	.....	.....	.....	100	.....	.....	.....	.....	2000	.....	300	.....	28,275 00
.....	2000	.....	.....	.....	.....	.....	.....	80	.....	.....	.....	.....	1060	.....	150	.....	13,345 0
.....	.....	.....	.....	.....	.....	.....	15000	.....	.....	.....	.....	.....	.....	.....	100	.....	1,600 00
1003	30712	56	1562	2690	2172	1624	71940	1638	55800	760	1900	275677	16911	75	4272	935	343,701 48

## RETURN showing the Number, Tonnage and Value of Vessels and Boats engaged in

DISTRICT.	VESSELS AND BOATS EMPLOYED IN FISHING.							FISHING MATERIAL.			
	Vessels.				Boats.			Nets.		Trawls.	
	No.	Tonnage.	Value.	Men.	No.	Value.	Men.	Fathoms.	Value.	No.	Value.
<i>Richmond County.</i>			\$			\$			\$		\$
Arichat.....	4	113	2260	20	40	240	102	1540	625	1000	595
Cape Hogan.....					50	550	55	3600	900	1200	600
Petit de Grat.....	2	67	1340	14	118	1180	153	19800	4950	6200	3100
Rocky Bay.....					34	340	45	10200	2550	1600	800
Cape LeRond.....	1	40	800	11	26	260	43	1300	325	1100	550
Lower d'Esconsse.....	6	284	5680	67	70	700	90	600	179	975	450
D'Esconsse.....	9	361	7220	88	88	880	134	1880	592	540	270
Poulimand.....	3	89	1780	27	21	210	28	155	30		
River Inhabitants Basin and Port Malcolm.....	11	405	8100	55	118	1180	134	14600	4130	11850	2365
West Arichat.....	1	13	260	2	67	670	67	360	60	4100	2058
Black River.....					40	400	40	8000	200		
Fourchu.....					23	795	61	5840	1172		
Framboise.....					14	350	34	1652	364		
St. Esprit.....					6	120	12	1320	271		
L'Archevêque.....					11	220	24	2212	450		
Grand River.....					25	500	53	8200	1590		
Point Michaud.....					14	200	30	2000	600		
L'Ardoise.....	2	23	500	10	150	2600	320	13550	6200		
St. Peter's Island.....	2	30	600	10	60	1250	120	8000	4280		
River Bourgeoise.....	25	624	11600	180	17	150	20	3200	1000		
St. Peter's.....	3	73	1400	21	40	600	80	12000	1750		
Totals.....	69	2122	31540	505	1032	13395	1645	120009	32218	28565	10788

the Fisheries, Quantity and Value of Fishing Material, &c.—Nova Scotia—Con.

KINDS OF FISH.													FISH PRODUCTS.		VALUE.
Salmon, barrels.	Mackerel, barrels.	Mackerel, in cans.	Herring, barrels.	Alewives, barrels.	Cod, cwt.	Hake Sounds, lbs.	Haddock, cwt.	Halibut, lbs.	Squid, barrels.	Smelt, lbs.	Eels, barrels.	Lobsters, cans.	Fish Oil, gallons.	Fish used as Bait, barrels.	
															\$ cts.
....	158	....	552	4	1375	....	275	....	3	13000	....	21200	580	....	15,726 00
....	50	....	300	....	300	....	500	....	....	....	....	3000	150	....	9,410 00
1	240	....	377	....	1900	....	720	....	....	....	....	93200	680	....	29,462 50
....	40	....	140	....	440	....	130	....	....	....	....	....	200	....	3,705 00
....	60	....	137	3	600	....	25	....	....	....	....	48000	240	....	11,073 50
....	42	....	93	5	3961	....	53	3600	....	....	....	38400	1750	....	25,475 00
....	110	....	80	....	4089	....	95	....	....	....	....	....	2535	....	21,647 00
....	5	....	11	....	875	600	18	....	....	....	....	....	232	....	4,662 80
....	398	....	1974	....	1060	....	80	....	....	....	....	....	180	....	19,577 00
5	112	....	665	151	720	....	5	....	....	....	....	48240	300	....	15,371 10
....	....	....	600	....	400	....	....	....	....	....	....	....	200	....	4,660 00
....	84	....	84	....	1260	....	....	....	....	....	....	67200	220	....	16,720 00
....	44	....	88	....	140	....	....	....	....	....	....	....	132	....	1,694 80
....	30	....	60	....	60	....	....	....	....	....	....	....	24	....	969 60
....	55	....	88	....	330	....	....	....	....	....	....	43200	110	....	8,743 00
....	100	....	250	....	288	....	....	....	....	....	....	....	75	....	3,851 00
5	60	800	100	10	125	....	40	....	....	....	....	60000	40	....	10,549 50
....	500	....	500	180	1400	....	900	....	....	....	....	....	900	....	19,950 00
....	450	....	260	40	600	....	400	....	....	....	6	150000	400	35	33,022 50
....	15	....	40	10	7000	....	200	....	....	....	15	26400	4200	....	38,161 00
....	100	....	25	....	600	....	....	....	....	....	....	....	300	....	4,332 50
11	2653	800	6424	403	27523	600	3441	3600	3	13000	21	625840	13448	35	298,763 80



RETURN showing the Number, Tonnage and Value of Vessels and Boats engaged in

DISTRICT.	VESSELS AND BOATS EMPLOYED IN FISHING.						FISHING MATERIAL.										
	Vessels.			Boats.			Nets.										
	No.	Tonnage.	Value.	Men.	No.	Value.	Men.	Fathoms.	Value.	Salmon, barrels.	Salmon, fresh, in ice, lbs.	Salmon, smoked, lbs.	Salmon, in cans, lbs.	Mackerel, barrels.	Mackerel, in cans.	Herring, barrels.	Herring, smoked, in boxes.
<i>Victoria County.</i>			\$		\$			\$									
Englishtown. ....	1	26	300	4	30	420	56	4415	1954	48				56		628	
Black Head. ....					12	200	20	1430	644	18				30		250	
Bird Island. ....					6	120	12	850	340					12		180	
Barachois. ....					18	396	28	1810	748	4				42		210	
Indian Brook. ....					17	238	34	2550	1020					68		340	
Little River. ....					17	394	22	1925	770					44		275	
Black Rock, N. shore. ....					9	230	10	750	300					15		125	
Breeding Cove. ....					28	756	28	2450	980					28		280	
French River. ....					28	574	42	3150	1260					84		525	
Wreck Cove. ....					24	648	24	2400	960					24		144	
Path End. ....					6	162	6	600	240					9		45	
Smoky. ....					10	270	10	872	350					10		75	
South Bay Ingonish. ....					190	3960	280	21500	8832	27				280		140	
North Bay Ingonish. ....					180	1820	260	22750	9100					65		130	
Ingonish Island. ....					10	140	20	1750	700					5		10	
Rocky Side St. Ann's. ....					10	192	16	980	464	10				32		160	
South Gut. ....					3	42	6	200	80					6		45	
North Gut. ....					8	112	16	1000	400					16		96	
Munroe's Point. ....					15	288	24	1980	864	12				36		144	
Goose Cove. ....					6	84	12	900	360					12		60	
North River. ....					33	370	50	2620	1096	8				25		250	
Graplin. ....					10	140	20	1250	500					40		150	
Cape Dauphin. ....					24	544	32	2400	960					48		192	
New Campbellton. ....					28	652	36	3150	1260					9		216	
N. side Big Bras d'Or. ....					24	696	28	2800	1120					7		168	
S. side Big Bras d'Or. ....					40	950	50	4250	1700					20		300	
Big Harbour. ....					8	112	16	600	240							80	
Eel Cove. ....					19	396	28	2800	1120					56		350	
Meat Cove. ....					16	320	36	704	400					50		45	
Wreck Cove. ....					8	160	18	640	384					19		23	
Bay St. Lawrence pond. ....					42	840	93	2600	1560	6				98		50	
North Harbour. ....					32	640	72	1920	1152	10				125		45	
White Point. ....					50	1000	113	4000	2400	25				209		75	
New Haven. ....					35	1400	70	2560	1295					20		80	
Neil's Harbour. ....					40	1600	80	2900	1450							80	
Green Cove. ....					30	600	60	1700	820	7				20		70	
Grand Narrows, north. ....	1	45	500	3	70	1120	166	2945	1045	3				27		442	
Baddeck. ....					9	124	15	870	287	24				8		88	
Washabuck. ....					11	227	20	470	217					5		74	
S. side Little Narrows. ....					28	203	39	1878	247	1				5		76	
N. side Little Narrows. ....					13	107	18	2265	132					3		10	
Totals. ....	2	71	800	7	1197	23247	1996	119584	49751	203				1668		6726	
Grand totals for District No. 1. ....	95	2783	4515	662	3919	88625	7580	382609	142838	228	71662	50	9560	8128	1000	31326	100

## the Fisheries, Quantity and Value of Fishing Material, &amp;c.—Nova Scotia—Con.

KINDS OF FISH.															FISH PRODUCTS.				VALUE.	
Alewives, barrels.	Cod, cwt.	Cod Tongues and Sounds, barrels.	Hake and Pollock, cwt.	Hake Sounds, lbs.	Haddock, cwt.	Halibut, lbs.	Shad, barrels.	Bass, lbs.	Trout, lbs.	Squid, barrels.	Smelt, lbs.	Eels, barrels.	Oysters, barrels.	Lobsters, cans.	Fish Oil, gallons.	Fish Guano, tons.	Fish used as Bait, barrels.	Fish used as Manure, barrels.		
...	208	...	...	...	14	...	...	...	...	1004	...	...	...	2400	104	...	17	...	\$ cts.	
...	90	...	...	...	5	...	...	...	...	50	...	...	...	...	45	...	4	...	9,782 10	
...	360	...	...	...	12	...	...	...	...	40	...	...	...	...	180	...	4	...	2,479 50	
...	120	...	...	...	14	...	...	...	...	10	...	...	25	...	60	...	7	...	2,878 00	
...	204	...	...	...	9	...	...	...	...	5	...	...	...	...	102	...	9	...	2,335 50	
...	132	...	...	...	11	...	...	...	...	22	...	...	...	26400	66	...	30	...	3,505 80	
...	75	...	...	...	10	...	...	...	...	8	...	...	...	...	38	...	3	...	6,341 40	
...	140	...	...	...	14	...	...	...	...	20	...	...	...	...	70	...	8	...	1,196 70	
...	250	...	...	...	42	...	...	...	...	24	...	...	...	...	126	...	15	...	2,451 00	
...	168	...	...	...	24	...	...	...	...	10	...	...	...	...	84	...	8	...	4,979 40	
...	33	...	...	...	6	...	...	...	...	2	...	...	...	...	16	...	2	...	1,909 60	
...	60	...	...	...	5	...	...	...	...	9	...	...	...	...	30	...	4	...	515 40	
...	7000	...	...	...	70	...	...	...	...	150	...	...	...	63120	3500	...	210	...	819 00	
...	6500	...	...	...	65	...	...	...	...	140	...	...	...	...	3250	...	130	...	47,878 80	
...	500	...	...	...	5	...	...	...	...	15	...	...	...	...	250	...	12	...	33,027 50	
...	40	...	...	...	...	...	...	...	...	16	...	...	...	...	20	...	4	...	2,560 50	
...	12	...	...	...	...	...	...	...	...	900	...	...	...	...	6	...	2	...	1,586 00	
...	24	...	...	...	...	...	...	...	...	16	...	...	...	...	12	...	4	...	3,945 90	
...	48	...	...	...	...	...	...	...	...	25	...	...	...	...	24	...	7	...	838 80	
...	24	...	...	...	...	...	...	...	...	18	...	...	...	...	12	...	3	...	1,680 10	
...	250	...	...	...	...	...	...	...	...	100	...	...	...	...	125	...	12	...	627 30	
...	150	...	...	...	10	...	...	...	...	30	...	...	...	...	75	...	15	...	2,796 00	
...	800	...	...	...	16	...	...	...	...	36	...	...	...	...	400	...	12	...	2,397 50	
...	900	...	...	...	18	...	...	...	...	14	...	...	...	...	450	...	20	...	5,490 00	
...	700	...	...	...	14	...	...	...	...	12	...	...	...	...	350	...	16	...	5,565 00	
...	625	...	...	...	25	...	...	...	...		...	...	...	...	312	...	20	...	4,273 00	
...	8	...	...	...	...	...	...	...	...	42	...	25	...	...	4	...	2	...	4,732 80	
...	140	...	...	...	7	...	...	...	...		...	...	...	...	70	...	25	...	400 60	
...	263	...	...	...	...	...	...	...	...		...	...	...	...	150	...	35	...	3,497 00	
...	96	...	...	...	...	...	...	...	...		...	...	...	13200	68	...	16	...	2,198 50	
...	920	...	...	...	...	...	...	...	...		...	...	...	...	600	...	86	...	2,700 70	
...	450	...	...	...	...	...	...	...	...		...	...	...	...	290	...	75	...	6,202 00	
...	1600	...	...	...	...	...	...	...	...		...	...	...	8544	1300	...	125	...	4,366 00	
...	1800	...	...	...	...	...	...	...	...		...	...	...	...	600	...	100	...	12,767 16	
...	3000	...	...	...	...	...	...	...	...		...	...	...	12960	2220	...	108	...	9,130 00	
...	1130	...	...	...	40	...	...	...	...		...	...	...	...	750	...	68	...	16,724 40	
...	2636	...	...	...	...	...	...	...	400	...	2200	9	1440	...	680	...	198	...	6,334 00	
...	6	102	...	...	...	...	...	...	800	1	120	4	72	...	25	...	4	...	19,829 00	
...	18	110	...	...	...	...	...	...	300	1	1700	26	30	...	25	...	10	...	1,740 00	
...	98	270	...	...	8	...	...	...	200	...	1200	24	32	...	35	...	28	...	1,473 00	
...	86	20	...	...	...	...	...	...	2300	...	2800	27	97	...	...	...	...	...	2,584 00	
...	302	31958	...	...	444	...	...	...	4000	2720	8020	115	1696	126624	16524	...	1458	...	1,495 00	
1956	107699	56	1572	3290	8481	24124	6	200	83160	4384	101120	1174	3608	1339565	55055	150	7856	935	1,086,721 90	

## RECAPITULATION

Of the Yield and Value of the Fisheries of the Island of Cape Breton,  
for the Year 1891.

Kinds of Products.	Quantities.	Rate.	Value.
		\$ cts.	\$ cts.
Salmon, pickled .....	Brls. 228	16 00	3,648 00
do fresh, in ice .....	Lbs. 71,662	0 20	14,332 40
do smoked .....	Lbs. 50	0 20	10 00
do preserved .....	Cans. 9,560	0 15	1,434 00
Mackerel, pickled .....	Brls. 8,128	14 00	113,792 00
do .....	Cans. 1,000	0 12	120 00
Herring, pickled .....	Brls. 31,326	4 50	140,967 00
do smoked .....	Boxes 100	0 25	25 00
Alewives .....	Brls. 1,956	4 50	8,802 00
Cod, dried .....	Cwt. 107,699	4 50	484,645 50
Cod tongues and sounds .....	Brls. 56	10 00	560 00
Hake and pollock .....	Cwt. 1,572	3 00	4,716 00
Hake sounds .....	Lbs. 3,290	0 75	2,467 50
Haddock .....	Cwt. 8,481	3 50	29,683 50
Halibut .....	Lbs. 24,124	0 10	2,412 40
Shad .....	Brls. 6	10 00	60 00
Bass .....	Lbs. 200	0 06	12 00
Trout .....	Lbs. 83,160	0 10	8,316 00
Squid .....	Brls. 4,384	4 00	17,536 00
Smelts .....	Lbs. 101,120	0 05	5,056 00
Eels .....	Brls. 1,174	10 00	11,740 00
Oysters .....	Brls. 3,608	3 00	10,824 00
Lobsters .....	Cans. 1,339,565	0 14	187,539 10
Fish oil .....	Galls. 55,055	0 40	22,022 00
Guano .....	Tons. 150	25 00	3,750 00
Fish used as bait .....	Brls. 7,856	1 50	11,784 00
do manure .....	Brls. 935	0 50	467 50
Total .....			1,086,721 90



COMPARATIVE Statement of the Value of Fisheries for the four Counties of the Island of Cape Breton, for the Years 1890 and 1891.

Counties.	1890.	1891.	Decrease.	Increase.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Cape Breton .....	190,051 26	196,222 66		6,171 40
Inverness .....	337,339 12	343,701 48	33,637 64	
Richmond .....	755,732 36	298,763 80	456,968 56	
Victoria .....	187,453 18	248,033 96		60,580 78
Total .....	1,510,575 92	1,086,721 90	490,606 20	66,752 18
Decrease .....			423,854 02	

TABLE showing the Number and Value of Vessels and Boats, Nets and Seines, &c., engaged in the Fisheries of the Island of Cape Breton, and the Approximate Estimates of the value of other materials not included in Returns for 1891.

Materials.	\$	\$
95 vessels, 2,783 tons .....	45,515	276,978
3,919 boats .....	88,625	
382,609 fathoms of nets .....	142,838	
Canning establishments .....	60,000	
Seines .....	6,000	222,800
Lobster traps .....	41,600	
Hand-lines, trawls, &c. ....	38,200	
Steamers, smacks, punts, canoes, &c. ....	14,500	
Fishing piers, houses and other sundries .....	59,500	
Fish trap-nets .....	3,000	
		499,778

## NOVA SCOTIA—

RETURN showing the Number, Tonnage and Value of Vessels and Boats engaged in  
and the Total Number of Men Employed, &c., in the

DISTRICT.	VESSELS AND BOATS EMPLOYED IN FISHING.						FISHING MATERIAL.				Salmon, fresh, in ice, lbs.	Mackerel, barrels.	Herring, barrels.	
	Vessels.				Boats.		Nets.		Weirs.					
	No.	Tonnage.	Value.	Men.	No.	Value.	Men.	Fathoms.	Value.	No.				Value.
			\$		\$				\$		\$			
<i>Antigonish County.</i>														
Harbour Bouché and Little Tracadie.....	1	15	200	3	29	410	49	13740	1013	.....	.....	.....	137	602
Big Tracadie and East Bayfield....					37	461	50	12708	743	.....	.....	.....	53	158
Bayfield, Antigonish Harbour and Morristown.....					27	362	33	8133	2288	.....	.....	17600	47	90
Lakeville, Ballentine's Cove and Cape George.....					29	546	52	10500	1785	.....	.....	6400	101	154
Georgeville and Malignant Cove....					26	401	51	17350	949	.....	.....	3800	31	203
Doctor's Brook, Arisaig, Moidart Knoydart.....					19	324	36	8640	704	.....	.....	3050	25	107
Totals .....	1	15	200	3	167	2504	271	71071	7482	.....	.....	30850	404	1314
Values.....\$												6170	5656	5913
<i>Colchester County.</i>														
Sterling .....					6	71	11	535	290	.....	.....	.....	.....	32
Stewiacke .....					30	180	44	330	210	.....	.....	2280	.....	.....
Five Islands.....					6	188	12	485	98	2 500	.....	375	.....	.....
Economy .....					14	455	28	4125	645	16 4700	.....	2000	.....	.....
Little Bass River and Highland Village .....					12	435	24	4035	635	2 525	.....	3245	.....	.....
Great Village and Great Village Point.....					6	210	12	1975	340	.....	.....	1730	.....	.....
Little Dyke.....										.....	.....	.....	.....	.....
Masstown.....										.....	.....	.....	.....	.....
Princeport.....					13	360	26	3610	525	.....	.....	5000	.....	.....
Totals .....					87	1899	157	15095	2743	20 5725	.....	14630	.....	32
Values.....\$												2926	.....	144

DISTRICT No. 2.

the Fisheries, Quantity and Value of Fishing Material, Kinds and Quantities of Fish, Province of Nova Scotia, for the year 1891.

KINDS OF FISH.													FISH PRODUCTS.			VALUE.	
Herring smoked, in boxes.	Alewives, barrels.	Cod, cwt.	Pollock, cwt.	Hake, cwt.	Haddock, cwt.	Halibut, lbs.	Shad, barrels.	Bass, lbs.	Trout, lbs.	Smelt, lbs.	Eels, barrels.	Oysters, barrels.	Lobsters, cans.	Fish Oil, gallons.	Fish Roes, barrels.		Fish used as bait, barrels.
....	143	196	....	167	64	....	....	....	1000	....	50	....	82000	176	....	144	\$ cts.
....	27	72	....	121	....	....	....	....	2000	5000	40	200	....	36	....	150	19,243 00
....	8	....	....	40	....	....	....	1300	3000	10000	30	20	36000	13	....	57	4,091 00
....	40	185	....	525	123	....	....	1330	....	5000	....	....	76400	219	1003	205	11,098 00
....	4	182	....	839	173	....	....	....	....	....	....	....	35600	510	751	147	18,580 00
....	23	87	....	280	55	....	....	450	....	....	....	....	36000	181	219	90	12,040 00
....	245	722	....	1972	415	....	....	3080	6000	20000	120	220	266000	1135	1973	787	8,409 00
....	1103	3250	....	5916	1452	....	....	185	600	1000	1200	660	37240	454	1480	1181	73,461 00
....	40	....	....	....	....	....	....	....	....	5000	....	....	....	....	....	....	394 00
....	127	....	....	....	21	1800	28	500	3400	....	....	....	....	....	....	....	1,286 00
2400	84	....	....	....	16	1075	368	....	165	....	....	....	....	82	....	12	1,278 00
....	....	....	....	....	....	....	....	....	....	....	....	....	....	45	....	5	5,247 00
....	....	....	....	....	....	....	182	....	....	....	....	....	....	....	....	....	2,469 00
....	....	....	....	....	....	....	87	....	....	....	....	....	....	....	....	....	1,216 00
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	130	....	....	....	....	....	....	....	....	....	2,300 00
2400	40	211	....	....	37	2875	826	500	3565	5000	....	....	....	127	....	17	....
600	180	950	....	....	130	287	8260	30	356	250	....	....	....	51	....	26	14,190 00



RETURN showing the Number, Tonnage and Value of Vessels and Boats engaged in

DISTRICT.	VESSELS AND BOATS EMPLOYED IN FISHING.						FISHING MATERIAL.				Salmon, fresh, in ice, lbs.	Mackerel, barrels.	Herring, barrels.	Alewives, barrels.	
	Vessels.			Boats.			Nets.		Weirs.						
	No.	Tonnage.	Value.	Men.	No.	Value.	Men.	Fathoms.	Value.	No.					Value.
<i>Cumberland County.</i>			\$			\$			\$		\$				
Pugwash, Port Philip and Gulf Shore.....					35	1220	17	1320	845			260	2	3	
Wallace.....					58	1116	65	2080	520						
River Philip.....					4	70	8	250	305			2225	5	100	395
Laplanche River.....					3	45	3	127	75						420
Minudie and Apple River.....					9	150	10	2302	1400			1310			
Advocate.....					8	135	17	94	65				99	65	
Spencer Island.....					4	110	8	38	25				48	40	
Port Greville.....					7	125	14	77	55	1	100		37	55	
Parrsboro'.....					3	70	6	72	50	1	100	400		15	
Totals.....					131	3041	148	6360	3340	2	200	4195	191	278	815
Values.....\$												769	2674	1251	3668

the Fisheries, Quantity and Value of Fishing Material, &c.—Nova Scotia—Con.

KINDS OF FISH.											FISH PRODUCTS.			
Cod, cwt.	Pollock, cwt.	Hake, cwt.	Haddock, cwt.	Halibut, lbs.	Shad, barrels.	Trout, lbs.	Smelt, lbs.	Eels, barrels.	Oysters, barrels.	Lobsters, cans.	Lobsters, tons.	Fish used as bait, barrels.	Fish used as Manure, barrels.	VALUE.
							63658			205905	1½		200	\$ cts. 32,263 00
					2	1000	28100	2	450	196196		420	175	33,378 00
					8	1300	1200	15						2,755 00
5		5	8		225									2,577 00
78	59	182	132	392										3,253 00
41	42		59	215										1,390 00
95	2		87	1075										1,612 00
27	11		30	650										472 00
246	114	187	316	2332	235	2300	92958	17	450	402101	1½	420	375	77,700 00
1107	342	561	1006	233	2150	230	4647	170	1350	5629	60	630	188	

## RETURN showing the Number, Tonnage and Value of Vessels and Boats Engaged in

DISTRICT.	VESSELS AND BOATS EMPLOYED IN FISHING.						FISHING MATERIAL				Salmon, barrels.	Salmon, fresh, in ice, lbs.	Salmon, smoked, lbs.	Salmon, in cans, lbs.	Mackerel, barrels.	
	Vessels.			Boats.			Nets.		Weirs.							
	No.	Tonnage.	Value.	Men.	No.	Value.	Men.	Fathoms.	Value.	No.						Value.
<i>Guysboro' Co.</i>			\$			\$		\$	\$							
From East Side Beckerton, Fisherman's Harbour, Country Harbour to New Harbour. ....	5	103	2050	23	205	6329	246	21122	4598	1	12	....	100	....	960	505
New Harbo'r to White Head White Head to Canso, in- cluding Tittle.....	3	61	1450	16	246	8987	474	53541	10893	..	....	....	....	....	....	1160
Thence to Salmon River...	1	29	750	4	109	4956	227	19719	5147	10	3140	....	....	....	....	789
Thence to County Line, in- cluding Cook's Cove, Guys- boro' North Shore, Straits of Canso.....	1	79	3000	12	251	3185	269	31236	7190	26	3067	1	2615	....	....	1058
Beckerton, Holland's Har- bour, Indian Harbour, Indian River, Wine Har- bour and Barachois.....	7	215	4000	41	404	5908	475	58815	12101	34	2855	....	6220	....	....	2297
St. Mary's River and Bay..	4	179	2900	21	131	2596	123	7525	2595	1	140	487	3135	180	80	460
Gegoggin Harbour.....	1	16	400	6	43	790	44	3390	970	..	....	....	15920	1170	....	80
Liscomb and Spanish Bay..	1	24	300	6	99	1772	134	2470	755	..	....	....	3390	100	....	54
Marie Joseph. ....	..	..	..	..	56	1320	80	960	245	..	....	....	..	..	..	106
Ecum Secum. ....	..	..	..	..	57	720	64	800	315	..	....	....	1400	100	....	68
Totals. ....	23	706	14850	129	1630	36963	2160	200528	96154	72	9214	488	34655	2970	1040	6722
Values.. ....	..	..	..	..	..	..	..	..	..	..	..	7808	6931	594	156	94248



the Fisheries, Quantity and Value of Fishing Material, &c.--Nova Scotia--Con.

KINDS OF FISH.													FISH PRO- DUCTS.			VALUE.
Herring, barrels.	Alewives, barrels.	Cod, cwt.	Pollock, cwt.	Hake, cwt.	Haddock, cwt.	Halibut, lbs.	Bass, lbs.	Trout, lbs.	Squid, barrels.	Smelt, lbs.	Eels, barrels.	Lobsters, cans.	Fish Oil, gallons.	Fish used as bait, barrels.	Fish used as manure, barrels.	
																\$ cts.
2040 4934 w. 2359 955	30 1351	2831 7308	101 19	.... ....	466 4897	3350 2815	.... ....	1000 2500	17 ....	10900 ....	3 6	187392 409200	1404 5506	216 ....	106 ....	59,474 00 154,687 00
		5328 2126	13 7	.... 38	2712 976	.... ....	.... 600	.... ....	1577 1224	.... ....	.... 2	116000 50000	3532 1263	.... 274	.... 36	79,130 00 45,932 00
7257	529	2732	....	59	816	....	....	....	622	4900	....	....	1171	422	10	87,606 00
1785 233 113 192 11 42	32 30 17 262 .... 300	1495 311 270 1890 1232 329	.... .... .... 16 .... ....	.... .... .... .... .... ....	291 36 48 244 245 51	1960 730 1050 6850 1050 825	.... .... .... .... .... ....	40325 1750 1950 8275 .... 6000	.... .... .... .... .... ....	10990 4670 3430 9650 .... 100	39 1 4 .... .... 37	88500 .... 2600 122100 46240 59200	8564 124 145 950 660 170	1506 227 260 1230 621 461	.... 20 .... 162 30 ....	54,070 00 8,139 00 4,706 00 35,713 00 15,726 00 14,554 00
19921	2613	25852	156	97	10782	18630	600	61800	3440	44640	92	1081232	23489	5217	364	559,737 00
89645	11759	116334	468	291	37737	1863	36	6180	13760	2232	920	151372	9395	7826	182	559,737 00

## RETURN showing the Number, Tonnage and Value of Vessels and Boats engaged in

DISTRICT.	VESSELS AND BOATS EMPLOYED IN FISHING.						FISHING MATERIAL.						
	Vessels.				Boats.		Nets.		Salmon, fresh, in ice, lbs.	Salmon, smoked, lbs.	Mackerel, barrels.	Mackerel, in cans.	
	No.	Tonnage.	Value.	Men.	No.	Value.	Men.	Fathoms.					Value.
<i>Halifax County.</i>			\$						\$				
North Shore .....	1	16	90	3	227	2689	220	24095	14522	1952	....	4115	....
East St. Margaret's .....	1	18	500	5	211	2237	182	26815	9208	2057	....	2332	....
Indian Harbour .....	4	72	2425	15	115	1703	96	20755	5415	990	....	1084	....
Peggy's Cove .....	2	25	300	8	51	1315	47	8965	2935	1114	....	565	....
Dover .....	3	48	1235	13	148	2386	119	20505	11336	700	....	1230	....
Prospect to Ferguson's Cove, in- cluding Pennant, Sambro, Ketch Harbour, Portuguese Cove and Herring Cove .....	38	766	21175	217	776	12635	679	103192	52049	8590	....	8523	....
Halifax to Bedford .....	3	82	2050	20	12	108	14	2433	1481	1524	....	382	6000
Eastern Passage to Three Fathom Harbour .....	.....	.....	.....	.....	147	1844	136	43800	2825	4336	....	191	....
Seaforth to East Chezetcook ....	15	483	16850	155	276	4052	118	66305	3616	.....	....	210	....
East Chezetcook to Clam Harbour	12	317	7850	88	281	5667	207	44130	3198	1927	1465	156	....
Clam Harbour to Pope's Harbour	5	119	3050	25	153	3175	128	34198	2228	240	....	247	....
Pope's Harbour to Taylor's Head	5	179	3800	31	86	1812	60	32070	1912	.....	....	122	....
Taylor's Head to Beaver Point...	2	29	600	7	119	2704	91	26660	1776	2684	....	69	....
Beaver Point to Ecum Secum...	1	31	700	5	122	2163	142	11086	2300	385	120	496	....
Totals .....	92	2185	60625	592	2714	44490	2239	465009	114801	26494	1585	19722	6000
Value .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5299	317	276108	720

the Fisheries, Quantity and Value of Fishing Material, &c.—Nova Scotia—Con.

KINDS OF FISH.														FISH PRODUCTS.			VALUE
Herring barrels.	Alewives, barrels.	Cod, cwt.	Pollock, cwt.	Hake, cwt.	Hake Sounds, lbs.	Haddock, cwt.	Halibut, lbs.	Trout, lbs.	Squid, barrels.	Smelt, lbs.	Eels, barrels.	Lobsters, cans.	Lobsters, tons.	Fish Oil, gallons.	Fish used as bait, barrels.	Fish used as manure, barrels.	
297	2	131	1	125	189	24	.....	1000	2	.....	6	.....	.....	103	16	.....	60722
896	9	704	33	465	788	301	40	200	.....	.....	5	.....	.....	584	88	.....	43877
988	29	838	44	1466	2760	265	2600	.....	.....	.....	.....	.....	.....	1532	164	10	32372
235	3	291	33	426	705	162	100	.....	.....	.....	1	.....	.....	318	31	.....	13180
327	25	607	55	462	733	398	.....	.....	.....	.....	.....	.....	.....	513	101	.....	25526
2407	135	21478	1121	2761	5033	2965	69600	.....	.....	.....	.....	20000	.....	5112	526	10	267526
44	51	847	.....	.....	.....	25	.....	1000	.....	.....	.....	169648	155	230	13	.....	40863
536	53	1093	154	17	.....	758	4665	700	.....	20000	7	.....	.....	562	286	.....	16537
556	347	7255	59	5	.....	169	1712	550	.....	4750	12	.....	.....	2460	381	.....	42591
693	95	6166	304	222	212	349	8815	1250	.....	16000	45	181440	.....	2192	565	180	66587
704	6	1954	2	.....	90	138	620	500	.....	2000	13	80352	.....	756	324	80	28471
824	.....	863	5	318	820	94	200	.....	.....	.....	.....	88800	.....	362	140	85	24062
487	.....	893	11	.....	.....	161	540	.....	.....	.....	.....	77768	.....	359	280	75	19852
110	.....	962	7	5	7	75	2188	.....	8	.....	.....	399400	.....	360	226	350	68998
9104	755	44082	1829	6272	11337	5884	91080	5200	10	42750	89	1017408	155	15443	3141	790	.....
40969	3397	198370	5487	18816	8501	20594	9108	520	40	2137	890	142437	6200	6177	4712	395	751194



RETURN showing the Number, Tonnage and Value of Vessels and Boats engaged in the Fisheries, &amp;c.—Nova Scotia—Continued.

DISTRICT.	VESSELS AND BOATS EMPLOYED IN FISHING.						FISHING MATERIALS.				KINDS OF FISH.									
	Vessels.			Boats.			Nets.		Weirs.		Salmon, barrels.	Salmon, fresh, in ice, lbs.	Salmon, smoked, lbs.	Salmon, in cans, lbs.	Mackerel, barrels.	Mackerel, in cans.	Herring barrels.	Herring smoked, in boxes.	Alewives, barrels.	
	No.	Tonnage.	Value.	Men.	No.	Value.	Fathoms.	Value.	No.	Value.										
<i>Hants Co.</i>			\$			\$					\$									
Shubenacadie River, Maitland to Shubenacadie					34	251		1875		337		7590							137	
Shubenacadie to Grand Lake					59	142		1019		303		954							48	
West Hants					10	300		2500		750		500								
Totals					103	693		5394		1450		9044							185	
Value			\$									1809							833	
<i>Pictou County.</i>																				
West Pictou	1	12	250	2	99	1995	143	611	264						30		35		10	
Pictou Island					52	1115	94	661	140						25					
Central Division								30	25											
Southern Division					20	432	20	1766	1445			12235			20		268			
Merigonish Island					13	250	27	480	445			7500								
North Beach					5	80	6	780	375			3620								
Ponds					21	395	46	1130	640			5000								
Lismore					4	65	5	560	280			1950								
Totals	1	12	250	2	214	4392	350	6408	3614			30305			75		303		10	
Values												6061			1051		1364		45	
Grand Totals, Dist. No. 2.	117	2918	75925	726	5046	93922	5430	763925	229584 94		15139	488	150173	4555	1040	6000	30952	2400	4663	

RETURN showing the Number, Tonnage and Value of Vessels and Boats engaged in the Fisheries, &amp;c.—Nova Scotia—Continued.

DISTRICT.	KINDS OF FISH.												FISH PRODUCTS.			VALUE.			
	Cod, cwt.	Pollock, cwt.	Hake, cwt.	Hake Sounds, lbs.	Haddock, cwt.	Halibut, lbs.	Shad, barrels.	Bass, lbs.	Trout, lbs.	Squid, barrels.	Smelt, lbs.	Eels, barrels.	Oysters, barrels.	Lobsters, cans.	Lobsters, tons.		Fish Oil, gallons.	Fish used as Bait, barrels.	Fish used as Manure, barrels.
<i>Hants Co.</i>																			
Shubenacadie River, Maitland to Shubenacadie									300										2,135 00
Shubenacadie to Gnd. Lake								220	800										640 00
West Hants	10				2		98	500											1,242 00
Total	10				2		117	720	1100										4,017 00
Value	45				7		1170	43	110										
<i>Pictou County.</i>																			
West Pictou									300		10000	5	10	407144			295	361	67,256 00
Pictou Island	4										11000	10	30	264000			302	250	37,906 00
Central Division									1000										840 00
Southern Division	58										1648	6		131886			100	125	4,254 00
Merigonish Island																			20,259 00
North Beach																			724 00
Ponds	460													182000			231	175	28,984 00
Lismore																			390 00
Totals	522								1300		22648	21	40	1045030			928	911	160,613 00
Values	2349								130		1132	210	120	146304			1392	456	
Grand Totals, Dist. No.2.	71645	2099	8528	13310	17436	114917	1178	4900	81265	3450	227986	339	710	3811771	1563	40194	10510	2440	1,640,912 00

## RECAPITULATION

OF the Yield and Value of the Fisheries in District No. 2, Nova Scotia.

Kinds of Products.	Quantities.	Rate.	Value.	Total.	In-crease.	De-crease.
		\$ cts.	\$	\$	Qty.	Qty.
Salmon, pickled. . . . .	Brls. 488	16 00	7,808			1,213
do fresh on ice. . . . .	Lbs. 150,173	0 20	30,035		3,273	
do smoked . . . . .	do 4,555	0 20	911		2,653	
do in cans. . . . .	do 1,040	0 15	156			966
				38,910		
Mackerel, pickled. . . . .	Brls. 27,124	14 00	379,736		3,985	
do cans . . . . .	Cans. 6,000	0 12	720			26,978
				380,456		
Herring, pickled. . . . .	Brls. 30,952	4 50	139,286			9,472
do smoked. . . . .	Boxes. 2,400	0 25	600		540	
				139,886		
Alewives, pickled. . . . .	Brls. 4,663	4 50		20,985	483	
Cod, dried. . . . .	Cwt. 71,645	4 50	322,405		10,561	
Pollock, dried. . . . .	do 2,099	3 00	6,297		2,069	
Hake, dried. . . . .	do 8,528	3 00	25,584		2,111	
Hake sounds. . . . .	Lbs. 13,310	0 75	9,981		5,831	
Haddock. . . . .	Cwt. 17,436	3 50	61,026		9,021	
				425,293		
Halibut. . . . .	Lbs. 114,917	0 10		11,491	73,405	
Shad. . . . .	Brls. 1,178	10 00		11,780	422	
Bass . . . . .	Lbs. 4,900	0 06		294	4,171	
Trout . . . . .	do 81,265	0 10		8,126	29,895	
Squid . . . . .	Brls. 3,450	4 00		13,800		4,264
Smelts . . . . .	Lbs. 227,996	0 05		11,399	39,996	
Eels. . . . .	Brls. 339	10 00		3,390		910
Oysters. . . . .	do 710	3 00		2,130		82
Lobsters. . . . .	Cans. 3,811,771	0 14	533,647		537,992	
do fresh. . . . .	Tons. 156½	40 00	6,260			
				539,907		
Fish oil . . . . .	Galls. 40,194	0 40		16,077		*9,497
do used as bait. . . . .	Brls. 10,510	1 50		15,767	10,510	
do used as manure. . . . .	do 2,440	0 50		1,221	2,440	
				1,640,912		

\* Last year 20,000 gallons were entered in Halifax, but were obtained by trading in Labrador.



**COMPARATIVE Statement of Value of Fisheries in each County of District No. 2,  
Nova Scotia, for the Years 1890 and 1891.**

County.	Value in 1890.	Value in 1891.	Increase.	Decrease.
	\$	\$	\$	\$
Antigonish .....	81,720	73,461	.....	8,259
Colchester .....	10,206	14,190	3,984	
Cumberland .....	48,115	77,700	29,585	
Guysborough .....	457,682	559,737	102,055	
Halifax .....	728,246	751,194	22,948	
Hants. ....	6,870	4,017	.....	2,853
Pictou .....	120,176	160,613	40,437	
Totals.....	1,453,015	1,640,912	199,009	11,112

**TABLE showing the value of Vessels, Boats, Nets, &c., engaged in the Fisheries of  
District No. 2. Nova Scotia, with an Approximate Value of other Fishing  
Material, for the Year 1891.**

	Value.
	\$
117 vessels, 2,918 tons .....	75,925
5,046 boats .....	93,922
769,925 fathoms of nets. ....	229,584
94 weirs .....	15,139
Canning establishments .....	414,570
Lobster traps. ....	\$109,541
	53,160
Wharves and piers .....	162,701
Trawls, hand lines and implements .....	20,229
	22,496
	619,996

NOVA SCOTIA,

RETURN showing the Number, Tonnage and Value of Vessels and Boats engaged in and the Total Number of Men employed, &c., in the

DISTRICT.	VESSELS AND BOATS EMPLOYED IN FISHING.							FISHING MATERIAL.								
	Vessels.				Boats.			Nets.		Weirs.		Salmon, fresh, in ice, lbs.	Mackerel, barrels.	Herring barrels.	Herring smoked, in boxes.	
	No.	Tonnage.	Value.	Men.	No.	Value.	Men.	Fathoms.	Value.	No.	Value.					
<i>Annapolis Co.</i>			\$			\$			\$	\$						
Margaretville.....	4	92	2760	20	14	920	28	2100	1050	.	.	140	45	600	.....	
Port George.....	1	15	450	3	15	300	30	1600	800	1	200	2100	70	740	.....	
Port Lorne and Hampton	1	16	480	3	27	540	40	4000	2000	.....	.....	.....	.....	900	.....	
Phinney's Cove .....	.....	.....	.....	.....	14	280	20	1600	800	.....	.....	.....	.....	395	.....	
Parker's and Young Cove	.....	.....	.....	.....	34	680	50	2500	1250	.....	.....	.....	.....	1320	.....	
Litchfield and Hillsboro'	1	76	2280	14	19	380	46	1140	570	.....	.....	.....	.....	400	.....	
Thorne Cove and Gut....	6	234	7250	66	45	900	70	2700	1350	.....	.....	.....	.....	50	.....	
Thorne Cove to Ferry....	.....	.....	.....	.....	15	300	30	.....	.....	5	500	.....	200	45	9000	
South side Basin.....	2	30	900	10	40	800	50	500	250	8	1600	1000	100	12000	.....	
East side Basin.....	.....	.....	.....	.....	.....	.....	45	250	250	3	300	4000	.....	10	.....	
Lequille River.....	.....	.....	.....	.....	.....	.....	20	.....	.....	.....	.....	540	.....	.....	.....	
Round Hill River.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	410	.....	.....	.....	
Inland Lakes.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Totals.....	15	463	14120	116	223	5100	429	16390	8320	17	2600	7190	1315	4560	21000	

DISTRICT No. 3.

the Fisheries, Quantity and Value of Fishing Material, Kinds and Quantity of Fish, Province of Nova Scotia, for the Year 1891.

KINDS OF FISH.												FISH PRODUCTS.				VALUE.
Alewives, barrels.	Cod, cwt.	Cod Tongues and Sounds, barrels.	Pollock, cwt.	Hake, cwt.	Haddock, cwt.	Halibut, lbs.	Shad, barrels.	Bass, Lbs.	Trout, Lbs.	Smelt, Lbs.	Eels, barrels.	Fish Oil, gallons.	Fish Guano, tons.	Fish used as Bait, brls.	Fish used as Manure, barrels.	
....	360	4	205	55	65	2940	..	.....	.....	.....	.....	205	27	512	....	7,332 50
....	180	2	105	49	80	2500	..	.....	.....	.....	.....	108	25	410	....	7,425 00
....	425	4	195	175	.....	3675	..	.....	.....	.....	.....	124	32	465	....	8,562 00
....	152	2	48	51	75	980	..	.....	.....	.....	.....	100	15	341	....	3,724 50
....	325	4	162	200	168	500	..	.....	.....	.....	.....	120	24	420	....	10,024 70
....	510	7	193	500	1000	4000	..	.....	.....	.....	.....	540	40	510	....	11,615 00
....	3000	14	690	312	3114	14500	..	.....	.....	.....	.....	800	40	1500	....	31,290 00
....	20	....	9	.....	35	.....	..	.....	.....	.....	.....	.....	10	10	.....	5,747 00
....	540	4	250	100	540	5100	..	.....	.....	.....	.....	250	20	2500	500	25,470 00
100	.....	.....	.....	.....	.....	.....	10	2000	1000	1400	10	.....	.....	.....	.....	1,785 00
500	.....	.....	.....	.....	.....	.....	.....	.....	350	.....	6	.....	.....	.....	.....	2,453 00
10	.....	.....	.....	.....	.....	.....	2	500	500	.....	.....	.....	.....	.....	.....	227 00
.....	.....	.....	.....	.....	.....	.....	.....	.....	6800	.....	.....	.....	.....	.....	.....	680 00
610	5512	41	1857	1442	5077	34195	12	2500	8650	1400	16	2247	233	6668	500	116,335 80

Hake sounds, 2,900 lbs., at 75c.....	2,175 00
Live lobsters shipped to United States, 60 tons, at \$40.,.....	2,400 00
	120,910 80



RETURN showing the Number, Tonnage and Value of Vessels and Boats engaged in

DISTRICT.	VESSELS AND BOATS EMPLOYED IN FISHING.						FISHING MATERIAL.				Salmon, fresh, in ice, lbs.	Mackerel, barrels.	
	Vessels.				Boats.		Nets.		Weirs.				
	No.	Tonnage.	Value.	Men.	No.	Value.	Men.	Fathoms.	Value.	No.			Value.
<i>Digby Co.</i>			\$			\$			\$		\$		
Digby.....	14	622	12600	146	5	150	9	300	150				930
Broad Cove .....					10	250	18	400	240			84	
Gulliver's Cove.....					6	150	13	360	170			135	
Shelving Cove.....					6	180	11	400	200				
Centreville.....					13	490	26	740	370			210	
Sandy Cove.....					6	150	12	360	180	3	150	175	150
Mink Cove.....					8	240	16	420	211	1	1000		680
Little River.....					18	540	36	1440	720				
White's Cove.....					4	120	8	320	160				
Whale Cove.....					8	240	16	480	240				
East Ferry.....					6	180	12	360	185	1	100		150
Smith's Cove.....										9	720		750
St. Mary's Bay.....					2	25	3	180	72	13	1105		1300
Weymouth.....					15	450	30	500	200	4	4500		1365
White Cove.....					25	750	50	900	360	1	2500		710
Church Point.....	2	26	550	10	6	120	12	420	168				
Belliveau's.....	1	10	100	5	14	420	28	500	200				140
Metagan.....					13	390	26	460	180	2	150		450
Cape St. Mary's.....					12	420	30	480	192				15
Bay View.....					4	100	8	160	80				
Westport.....	24	490	19000	165	30	900	75	15000	7500				3000
Freeport.....	10	185	6000	60	60	1200	120	10000	500				2000
Tiverton.....	5	120	3500	50	20	400	50	6000	3000				400
Totals.....	56	1453	41750	436	291	7865	609	40480	29399	34	10225	604	12040

the Fisheries, Quantity and Value of Fishing Material, &c.—Nova Scotia—Con.

KINDS OF FISH.										FISH PRODUCTS.			VALUE.	
Herring barrels.	Herring smoked, in boxes.	Cod, cwt.	Cod Tongues and Sounds, barrels.	Pollock, cwt.	Flake, cwt.	Haddock, cwt.	Halibut, lbs.	Shad, barrels.	Hake Sounds, lbs.	Lobsters, cans.	Fish Oil, gallons.	Fish used as bait, barrels.		Fish used as manure, barrels.
350		5429		105	9570	6352	223500	150		27680	3546	1775	1050	120,838 60
		115		42	1301	153					320	85	240	5,389 30
		188		80	407	164					487	180	250	3,317 80
		202		22	335	183					344	150	255	2,960 60
		364		11	2177	325					960	780	1300	10,528 00
		90		50	155	135					550	60	475	4,115 00
		480		25	498	296					1060	200	640	15,129 00
		1116		54	408	1560					2880	270	2000	14,155 00
		120		12	228	144					320	60	375	2,109 50
		240		30	278	358					650	110	750	3,947 00
		150		120	334	330					480	72	575	5,807 50
100	15000							6						14,760 00
35								40						18,757 50
		75		156		175						30	375	20,730 50
		125				625						125	750	13,127 50
65		245		80		30					75	25	150	1,835 00
		70			25	250					150	75	200	3,422 50
		520		130							260	75	325	9,334 00
		300		150		350					300	100	300	3,555 00
		200		620	263	265					320	60	250	4,782 00
1500		27400	55	19300	12300	21500	68000		6300		35000	4300	700	370,675 00
950		15100	28	11250	8600	13800	37000		2400		16500	2900	850	222,330 00
225		3600	10	4200	2200	2500	11000		500		3800	1000	200	54,457 50
3225	15000	36129	93	56437	39079	49495	339500	196	9200	27680	68002	12432	12010	926,063 80
Live lobsters exported, 756 tons at \$40.....														30,240 00
Finnan haddies, 10,830 cases at \$2.40.....														25,992 00
Fresh haddock, 740,000 lbs. at 2c.....														14,800 00
Total.....														997,095 80

RETURN showing the Number, Tonnage and Value of Vessels and Boats engaged in

DISTRICT.	VESSELS AND BOATS EMPLOYED IN FISHING.						FISHING MATERIAL.				Salmons, fresh, in ice, lbs.	
	Vessels.				Boats.		Nets.		Weirs.			
	No.	Tonnage.	Value.	Men.	No.	Value.	Men.	Fathoms.	Value.	No.		Value.
			\$			\$			\$		\$	
<i>King's County.</i>												
Avonport.....					12	200	12	4000	2000			
Aylesford.....												1000
Gaspereaux.....												700
Kentville.....												
Bout Island.....								2200	500	1	400	
Long Island.....								2750	750	2	750	
Starr's Flats.....								3000	1000	3	900	
Kingsford.....	2	34	800	5	1	30	2	180	100			
Medford.....	2	51	650	6	2	40	6	170	80			
Blomedon.....	1	7	150	2	2	85	4	200	110	1	150	
Baxter's Harbour.....					17	340	34	3060	1100	1	200	1500
Hall's Harbour.....	2	24	600	5	20	300	40	5000	1500	8	2000	3200
Hunting Point.....								750	300	1	400	3000
Chipman's Brook.....					6	120	12	750	300	1	200	900
Black Rock.....					12	240	24	1600	950	2	300	250
Harbourville.....					16	320	32	1500	1200	6	1200	600
Morden.....								350	175	2	300	1900
Scott's Bay.....								4000	1000	3	1200	
Totals.....	7	116	2200	18	88	1675	156	29440	11065	31	8000	41850



the Fisheries, Quantity and Value of Fishing Material, &c.—Nova Scotia—Con.

KINDS OF FISH.												FISH PRODUCTS.			VALUE.
Mackerel, barrels.	Herring, barrels.	Herring smoked, in boxes.	Alewives, barrels.	Cod, cwt.	Pollock, cwt.	Haddock, cwt.	Halibut, lbs.	Shad, barrels.	Trout, lbs.	Smelt, lbs.	Eels, barrels.	Fish Oil, gallons.	Fish used as bait, barrels.	Fish used as manure, barrels.	
															\$ cts.
			1000												4,500 00
								800							280 00
			1000					1200		4000	6				5,020 00
										1000					50 00
								100							1,000 00
								75							750 00
								180							1,800 00
14	100			36	15										853 00
4	100	50		200	10		1200						20	100	1,628 50
67	52	1800		116	100	30		4					25	99	2,646 50
60	250	500		510	500	200							60	250	7,179 00
200	750	10000		750	500	100		10					200	300	20,880 00
20	100	2000		40	30	20							40	100	2,286 00
40	200			240	60	40							90	50	3,138 50
40	400	50000		120	100	40							60	120	16,024 00
100	1500	12000		400	100	50	2000						500	150	14,770 00
56	141			50	60										2,203 50
50	150	8000		20	10	40		232					20	200	6,073 00
651	3743	84350	2000	2482	1485	520	3200	601	2000	5000	6	970	1035	2955	91,082 00
Lobsters shipped alive, 7 tons at \$40.....															280 00
															91,362 00

RETURN showing the Number, Tonnage and Value of Vessels and Boats engaged in

DISTRICT.	VESSELS AND BOATS EMPLOYED IN FISHING.						FISHING MATERIAL.								
	Vessels.				Boats.		Nets.		Weirs, Pounds and Traps						
	No.	Tonnage.	Value.	Men.	No.	Value.	Men.	Fathoms.	Value.	No.	Value.	Salmon, fresh, in ice, lbs.	Salmon, smoked, lbs.	Mackerel, barrels.	Herring, barrels.
<i>Lunenburg Co.</i>			£		£			£	£						
Chester .....	3	139	2000	24	90	2800	115	28500	4475	35	14000	9000	500	2410	350
Martin's River ....	2	170	6000	27	75	1420	45	14400	1375	15	6000	2500	200	615	200
Fox Point.....	1	39	2000	9	80	1940	115	65300	5450	...	...	685	...	1208	730
Mill Cove.....					71	1630	80	53400	5600	...	...	560	...	1130	640
Lodge.....					24	400	34	26000	2400	...	...	275	...	475	265
N.-W. Cove .....					50	1600	62	39800	4200	...	...	850	...	1350	825
Aspotogan .....	1	14	300	3	30	810	31	19500	1700	...	...	350	...	750	480
Sandy Beach.....					41	950	50	38000	3600	...	...	340	...	720	575
Blandford.....	1	24	600	7	86	2100	86	75000	4100	4	1600	520	...	2305	1645
Little Tancook....					40	1600	55	48000	4350	...	...	110	...	600	590
Big Tancook .....					172	7860	190	140600	10850	3	1200	550	...	2095	4860
Deep Cove.....					32	650	40	22500	2600	5	2000	1050	50	730	263
Lunenburg to Cross Island.....	75	6700	375000	1050	130	6555	198	26314	10411	...	...	...	...	1800	2200
Mahone Bay and Indian Point Is- lands.....	17	1400	85000	214	22	1050	35	3300	1180	...	...	...	...	525	250
E. S. La Have to New Dublin.....	61	4750	297500	900	448	9750	347	41849	19000	...	...	350	200	2550	5400
Petite Rivière to E. Port Medway...	8	600	44000	110	212	5500	187	25000	10300	...	...	45	37	1200	4460
Totals.....	169	13836	812400	2344	1603	46615	1670	667463	91591	62	24800	17185	987	20463	23733

the Fisheries, Quantity and Value of Fishing Material, &c.—Nova Scotia—*Con.*

KINDS OF FISH.													FISH PRODUCTS.			VALUE.
Alewives, barrels.	Cod, cwt.	Cod Tongues and Sounds, brls.	Pollock, cwt.	Hake, cwt.	Haddock, cwt.	Halibut, lbs.	Shad, barrels.	Trout, lbs.	Squid, barrels.	Smelt, lbs.	Eels, barrels.	LoBSTERS, cans.	Fish Oil gallons.	Fish used as bait, barrels.	Fish used as manure, barrels.	
150	1245	6	175	.....	30	1200	....	400	30	1500	12	100000	700	220	85	\$ cts.
38	2450	15	24	.....	.....	1575	....	260	10	800	18	.....	430	350	60	59,090 00
20	1035	5	30	.....	20	.....	.....	500	.....	500	3	.....	840	150	55	22,288 50
8	265	.....	38	.....	40	.....	.....	75	.....	375	2	.....	120	22	35	25,835 00
5	175	.....	50	.....	.....	.....	.....	.....	.....	.....	.....	.....	45	7	12	20,417 25
9	250	3	55	.....	.....	.....	.....	.....	.....	.....	4	.....	200	36	45	8,885 00
6	160	2	70	.....	.....	500	.....	70	.....	.....	1	50000	150	15	12	24,303 00
10	230	.....	61	.....	.....	300	.....	.....	.....	.....	2	.....	175	20	18	20,847 50
20	800	5	175	.....	150	400	.....	.....	18	.....	8	.....	500	90	60	14,137 50
5	380	.....	45	.....	165	320	.....	.....	.....	.....	.....	.....	260	70	58	45,033 50
21	565	.....	40	.....	310	500	.....	.....	5	.....	7	45000	355	150	160	13,732 00
30	55	.....	30	.....	.....	.....	.....	250	11	500	15	.....	130	15	30	61,949 00
20	119587	180	286	.....	13526	109360	....	....	25	....	10	54200	24576	200	650	12,414 50
....	16080	80	.....	.....	355	15200	....	....	10	....	.....	.....	6500	35	120	652,309 90
125	52600	156	125	11000	4245	64000	6	...	110	560	65	22800	3500	520	800	87,010 00
125	9260	25	2750	150	250	28000	10	....	63	2500	20	21600	1300	165	750	330,400 00
592	205137	477	3974	1250	19091	221355	16	1555	282	6735	167	293600	39781	2065	2950	96,422 40
Scallops, 400 dozen, at 50c.....																200 00
Clams, 7,000 cases at 12c.....																840 00
Grand total.....																1,496,115 00



RETURN showing the Number, Tonnage and Value of Vessels and Boats engaged in

DISTRICT.	VESSELS AND BOATS EMPLOYED IN FISHING.						FISHING MATERIAL.							
	Vessels.				Boats.		Nets.		Weirs.		Salmon, fresh, in ice, lbs.	Salmon smoked, lbs.	Mackerel, barrels.	Herring, barrels.
	No.	Tonnage.	Value.	Men.	No.	Value.	Fathoms.	Value.	No.	Value.				
<i>Queen's Co.</i>			\$			\$		\$	\$					
Liverpool. ....	1	99	4500	16	15	234	17	2320	1265	2 1000	1608	1073	244	
Port Mouton. ....	1	40	2000	10	27	1505	44	1440	360			100	1055	
South West. ....					36	900	36	3600	900			70	1083	
Mouton Island. ....					7	210	12	1200	300			3	380	
Brooklyn. ....	3	70	2620	17	24	450	43	4300	1075		765	58	235	
Port Joli. ....					29	1172	36	200	60				131	
Port Hebert. ....	1	14	400	4	6	100	9	180	50				83	
Somerville. ....					6	100	15	900	225				230	
Hunt's Point. ....					13	200	20	1200	600			10	271	
White Point. ....					10	225	14	1800	900			25	450	
Meadows. ....					4	50	6	220	66			5	38	
Coffin Island. ....					12	225	16	960	240			15	151	
Eagle Head. ....					6	200	8	640	160		350		60	
West Berlin. ....					17	210	17	1020	255			53	228	
East Berlin. ....					16	435	18	1080	270		600	7	80	
West Head. ....					38	671	51	3060	765			150	611	
Moose Harbour. ....					5	100	8	480	120			10	101	
Black Point. ....					7	110	7	420	105			9	53	
Milton. ....					5	50	5	84	24		1660			
Gull Island. ....					8	160	9	340	105			3	105	
East Head. ....					7	120	9	360	110		75	44	133	
Mill Village. ....					50	420	50	1850	672		3050	850		
Port Medway. ....	5	361	16700	73	64	1350	85	8950	1900		10000	1700	365	1715
Ponhook. ....					6	48	35	175	115		2500	1000		
Totals . . . . .	11	584	26220	120	418	13245	560	36779	16642	2 1000	20608	3550	2000	7437

the Fisheries, Quantity and Value of Fishing Material, &c.—Nova Scotia—Con.

KINDS OF FISH.													FISH PRODUCTS.			VALUE.
Alewives, barrels.	Cod, cwt.	Cod Tongues and Sounds, brls.	Pollock, cwt.	Hake, cwt.	Haddock, cwt.	Halibut, lbs.	Shad, barrels.	Trout, lbs.	Squid, barrels.	Smelt, lbs.	Eels, barrels.	Lobsters, cans.	Fish Oil, gallons.	Fish used as bait, barrels.	Fish used as manure, barrels.	
																\$ cts.
32	876	10		10	115					20			400	410	125	21,864 70
5	872	10		200	150	1000				10	48384	436	320	300		18,777 16
	189			94	95	2000				3	2640	190	140	100		8,104 10
	76			38	38						12000	75	250	100		4,171 00
50	1278	10		300	500	8700						639	10	400		12,199 10
10	162			81	81			1000		500	30		162		25	2,397 30
	108			35	40							11040	100			2,690 10
	73			36	36								75	25	50	1,665 00
	150			75	75								100	20	75	2,629 50
	67			39	39	1000							70	30	100	3,123 00
	13												20	5	12	316 00
	38			19	18	500						57600	40	25	400	9,523 00
	45			22	23								45	5	12	715 50
31	33			16	16								33	5	25	2,288 20
15	37			19	18								37	5	20	959 30
	234			117	117	1100							234	50	450	7,116 50
	12			5	6								12	5	25	704 30
	18			10	9							38400	18	10	250	6,020 20
216															50	1,329 00
	18		1	10	7								20	5		663 50
	28											8784	15	5	20	2,594 76
2030							25	1850		17400	13					11,350 00
1300	7800	20	40	500	200	6000	16	350	50	8000	20	40742	4050	300		67,668 58
575								2600			7					3,617 50
4264	12127	50	41	1626	1583	20300	41	5800	50	25900	103	219320	6821	1745	2539	192,487 30
Live Lobsters shipped to United States, 130 tons at \$40....																5,200 00
Clams, 20 barrels at \$7.....																140 00
																197,827 30

## RETURN showing the Number, Tonnage and Value of Vessels and Boats engaged in

DISTRICT.	VESSELS AND BOATS EMPLOYED IN FISHING.						FISHING MATERIAL.			
	Vessels.				Boats.		Nets.		Weirs and Traps.	
	No.	Tonnage.	Value.	Men.	No.	Value.	Fathoms.	Value.	No.	Value.
<i>Shelburne Co.</i>			\$			\$		\$		\$
Barrington .....	4	153	4600	40	48	1120	48	12000	1100	.....
Wood's Harbour .....	4	87	3200	42	116	1900	100	19000	1725	1 2000
Shag Harbour .....	5	100	2750	25	35	850	34	16000	1300	.....
Bear Point .....	1	13	300	6	55	978	32	9600	995	.....
Cape Island .....	4	159	4975	36	350	6720	400	37000	5000	6 11900
Port Latour and Baccaro. ....	1	88	4000	16	225	2900	115	47880	5150	.....
Upper Port Latour. ....	1	10	400	4	40	375	40	5280	600	.....
Cape Negro and Blanche. ....	.....	.....	.....	.....	70	750	63	12000	850	.....
Cape Negro Island .....	.....	.....	.....	.....	50	1000	55	6000	1000	1 1200
Port Clyde .....	.....	.....	.....	.....	4	30	4	500	30	.....
Nort-East Harbour .....	2	38	1200	13	9	900	18	6300	900	.....
Black Point and Red Head. ....	.....	.....	.....	.....	34	2500	79	16000	1350	.....
Roseway and McNutt's Island ..	.....	.....	.....	.....	45	3100	82	15750	1600	.....
Gunning Cove and Birchtown. ....	.....	.....	.....	.....	34	1500	56	5000	500	.....
Shelburne and Sand Point. ....	5	409	15000	82	45	1250	75	18750	2000	.....
Jordan Bay. ....	3	201	8500	45	27	1200	40	7500	700	.....
Jordan Ferry .....	.....	.....	.....	.....	29	1000	40	5000	500	.....
Lockeport. ....	21	1250	58000	260	45	4000	80	11000	3000	.....
	51	2508	102925	569	1262	30773	1359	250560	28300	8 15100



the Fisheries, Quantity and Value of Fishing Material, &c.—Nova Scotia—Con.

KINDS OF FISH.														FISH PRODUCTS.		VALUE.
Salmon, fresh, in ice, lbs.	Mackerel, barrels.	Mackerel, in cans.	Herring, barrels.	Alewives, barrels.	Cod, cwt.	Pollock, cwt.	Hake, cwt.	Haddock, cwt.	Halibut, lbs.	Trout, lbs.	Smelt, lbs.	Eels, barrels.	Lobsters, cans.	Fish oil, gallons.	Fish used as bait, barrels.	
\$ cts.																
475	70	....	300	675	2450	155	....	500	3100	450	....	50	....	1750	2020	
....	446	....	500	....	600	48	....	98	1600	....	....	128640	....	395	3500	21,267 50
....	175	....	200	15	985	103	....	326	6500	200	....	10	....	300	414	31,758 60
....	21	4800	22	....	150	25	....	80	1600	....	....	58080	....	50	418	10,397 00
....	2250	....	2507	....	5974	147	....	2750	78900	....	....	58560	....	5000	5300	10,519 20
....	306	....	979	....	2997	2270	....	994	3200	....	....	....	....	5518	1105	100,468 90
....	20	....	180	....	425	300	....	310	1800	....	....	25	....	600	375	35,544 70
....	80	....	650	....	350	100	....	225	1700	....	....	....	....	500	375	5,845 00
....	200	....	1500	340	2600	300	....	890	3500	500	....	....	....	2800	700	7,265 00
2250	....	....	....	....	20	....	....	....	....	....	....	....	....	....	....	28,615 00
800	81	....	181	20	440	....	....	170	....	....	....	10	....	270	....	590 00
....	55	....	990	....	725	20	....	700	....	....	....	....	....	917	....	4,981 50
....	108	....	970	28	482	134	....	480	....	....	....	....	....	700	....	11,364 80
300	49	....	865	65	130	82	....	196	....	....	....	....	....	252	40	10,534 00
900	80	....	843	112	7751	14	....	220	....	6000	....	65228	....	3100	300	4,318 80
....	86	....	564	....	4203	20	....	290	....	....	....	60000	....	1750	50	52,410 92
10000	74	....	553	60	67	....	....	174	....	2500	5000	....	....	60	....	32,855 50
700	500	....	2300	25	20168	570	1680	1120	25000	2000	....	....	....	4000	200	7,229 00
15425	4601	4800	14104	1340	50517	4288	1680	9523	126900	11650	5000	94	370508	27962	14797	125,678 50
Mackerel, exported, in ice, 5,070 brls. at \$14																70,980 00
Lobsters, exported alive, 2,311 tons at \$40																92,840 00
																665,463 42

## RETURN showing the Number, Tonnage and Value of Vessels and Boats engaged in

DISTRICT.	VESSELS AND BOATS EMPLOYED IN FISHING.							FISHING MATERIAL.				Salmon, fresh, in ice, lbs.	Mackerel, barrels.	Herring, barrels.
	Vessels.				Boats.			Nets.		Weirs and Traps.				
	No.	Tonnage.	Value.	Men.	No.	Value.	Men.	Fathoms.	Value.	No.	Value.			
<i>Yarmouth County.</i>			\$			\$			\$	\$				
Sanford .....	3	73	2920	22	28	280	56	3000	900	2	3000	10000	400	1250
Port Maitland .....	6	50	2000	20	20	200	40	2000	600	1	1500	10000	1030	1000
East Pubnico .....	6	290	11600	74	20	200	40	400	120				160	40
West Pubnico .....	13	778	31020	234	30	300	60	1960	588	3	1800		1722	275
Argyle .....	3	5	200	24	20	200	28	4000	1200				400	150
Yarmouth .....	14	989	39560	221	10	100	25	1500	450	3	4600	5000	10503	7420
Tusket Wedge .....	6	423	16020	98	35	350	60	5400	1620	6	900		3720	600
Tusket .....					125	1250	125	15000	4500	1	100	8000		
Sluice .....	3	25	1000	15	16	160	32	5000	1500				300	120
Eel Lake and Brook .....	1	35	1400	6	50	500	100	2500	750				100	
East and West Branches .....					70	700	100	5000	1500					
Salmon River .....					30	300	40	3000	900			1000		
Arcadia and Little River...	4	95	3800	17	40	400	85	2500	750	1	150		150	1400
Totals. ....	59	2763	110520	741	494	4940	791	51260	15378	17	12050	34000	18485	12255

the Fisheries, Quantity and Value of Fishing Material, &c.—Nova Scotia—Con.

KINDS OF FISH.													FISH PRODUCTS.				VALUE.	
Alewives, barrels.	Cod, cwt.	Cod Tongues and Sounds, barrels.	Pollock, cwt.	Hake, cwt.	Haddock, cwt.	Halibut, lbs.	Shad, barrels.	Trout, lbs.	Squid, barrels.	Smelt, lbs.	Eels, barrels.	Lobsters, cans.	Fish Oil, gallons.	Fish Roes, barrels.	Fish used as Bait, barrels	Fish used as Manure, barrels.		
...	1250	...	...	...	200	10000	...	...	...	...	...	...	100	...	100	120	\$ 20,700	cts. 00
100	4000	5	500	...	500	25000	10	...	...	...	...	...	2000	...	500	1000	46,820	00
100	2580	4	600	...	985	2400	...	...	...	...	50	...	625	...	191	...	20,853	00
...	7935	13	1365	...	2300	16200	...	...	...	...	...	...	2125	191	520	...	76,631	00
200	184	...	...	...	...	...	...	...	...	...	...	48000	...	...	300	1000	15,373	00
...	13255	...	3750	...	6010	168300	...	...	...	...	...	128184	4300	...	1750	...	310,735	26
100	5000	12	450	300	500	4000	...	...	120	...	15	...	2980	...	1500	...	84,822	00
1825	...	...	...	...	...	...	50	800	...	50000	40	...	...	...	...	...	13,292	50
100	125	...	...	...	20	250	...	...	...	...	50	...	20	...	...	...	6,355	50
350	200	...	...	10	...	10000	...	...	...	3000	150	...	...	...	...	...	6,625	00
835	...	...	...	...	...	...	20	2000	...	...	10	...	...	...	...	...	4,257	50
700	...	...	...	...	...	...	...	600	...	5000	20	...	...	...	...	...	3,860	00
35	200	...	20	...	...	...	...	...	...	1200	100	85000	...	...	...	1500	23,227	50
4345	34729	34	6685	310	10515	236150	80	4100	120	59200	435	261184	12150	191	4861	3620	633,552	26
Lobsters shipped alive, 1,960 tons, at \$40 .....																	78,400	00
Finnan Haddies, 200 cases, at \$2.40 .....																	480	00
Alewives, smoked, 120,000, at 80c per 100 .....																	960	00
Frost Fish, 150 barrels, at \$10. ....																	1,500	00
																	714,892	26



## RECAPITULATION

OF the Yield of the Fisheries for District No. 3, Nova Scotia, 1891.

Kind of Products.	Quantity.	Rate.		Value.	
		\$	cts.	\$	cts.
Alewives, pickled.....	Brls. 13,151	4	50	59,179	50
do smoked.....	No. 120,100	80 c. p.	100	960	00
Bass.....	Lbs. 2,500	0	06	150	00
Clams.....	Brls. 20	7	00	140	00
do preserved.....	Cans 7,000	0	12	840	00
Cod, dried.....	Cwt. 366,633	4	50	1,649,848	50
do roes.....	Brls. 191	3	00	573	00
Eels.....	" 822	10	00	8,220	00
Fish oil.....	Galls. 157,933	0	40	63,173	20
do guano.....	Tons 233	25	00	5,825	00
do used as bait.....	Brls. 43,603	0	50	21,801	50
do do manure.....	" 24,574	0	50	12,287	00
Frost fish.....	" 150	10	00	1,500	00
Haddock, dried.....	Cwt. 95,804	3	50	335,314	00
do fresh.....	Lbs. 74,000	0	02	14,800	00
do smoked.....	Cases 11,030	2	40	26,472	00
Hake, dried.....	Cwt. 45,387	3	00	136,161	00
do Sounds.....	Lbs. 12,100	0	75	9,075	00
Halibut.....	" 981,600	0	10	98,160	00
Herring, pickled.....	Brls. 69,057	4	50	310,756	50
do smoked.....	Boxes 120,350	0	25	30,087	50
Lobsters, preserved.....	Cans 1,172,292	0	14	164,120	88
do shipped alive.....	Tons 5,234	40	00	209,360	00
Mackerel, pickled and fresh.....	Brls. 64,625	14	00	904,750	00
do preserved.....	Cans 4,800	0	12	576	00
Pollock, dried.....	Cwt. 54,767	3	00	164,301	00
Salmon, sold fresh.....	Lbs. 136,862	0	20	27,372	40
do smoked.....	" 4,537	0	20	907	40
Scallops.....	Doz. 400	0	50	200	00
Shad.....	Brls. 946	10	00	9,460	00
Smelts.....	Lbs. 103,235	0	05	5,161	75
Squid.....	Brls. 452	4	00	1,808	00
Tongues and Sounds.....	" 695	10	00	6,950	00
Trout.....	Lbs. 33,755	0	10	3,375	50
Total.....				4,283,666	63

RETURN showing the Number, Tonnage and Value of Vessels and Boats, Weirs and Traps, engaged in the Fisheries District No. 3, of the Province of Nova Scotia, and Estimate of other Material not included in the Returns.

Articles.	Value.	Total.
	\$	\$
368 vessels, 21,723 tons.....	1,110,135	
4,379 boats.....	110,213	
1,092,372 fathoms of nets.....	200,695	
171 weirs and traps.....	73,775	1,494,818
Canning establishments.....	43,970	
Seines.....	13,600	
Lobster traps.....	38,500	
Steamers and smacks.....	13,600	
Smoke houses, &c.....	1,970	
Total.....		111,640
		1,606,458

RECAPITULATION by Counties showing the Number, Tonnage and Value of Vessels and Boats engaged in the Fisheries, Quantity and Value of Fishing Material, Kinds and Quantities of Fish, and the Total Number of Men Employed, &c., in the Whole Province of Nova Scotia, for the Year 1891.

COUNTIES.	VESSELS AND BOATS EMPLOYED IN FISHING.						FISHING MATERIAL.				KINDS OF FISH.								
	Vessels.			Boats.			Nets.		Weirs.		Salmon, brls.	Salmon, fresh, in ice, lbs.	Salmon, smoked, lbs.	Salmon in cans, lbs.	Mackerel, brls.	Mackerel, in cans.	Herring, brls.	Herring, smoked, in boxes.	Alewives, brls.
	No.	Tonnage.	Value.	Men.	No.	Value.	Fathoms.	Value.	No.	Value.									
Cape Breton. . . . .	8	148	2270	38	811	22378	63090	26971	.....	.....	14	14240	50	5560	592	.....	8200	100	248
Inverness. . . . .	16	442	10905	112	879	29605	79926	33898	.....	.....	.....	57422	.....	4000	3215	200	9976	.....	1003
Richmond. . . . .	69	2122	31540	505	1032	13395	120009	32218	*28565	10788	11	.....	.....	.....	2653	800	6424	.....	403
Victoria. . . . .	2	71	800	7	1197	23247	119584	49751	.....	.....	203	.....	.....	.....	1698	.....	6726	.....	302
Antigonish. . . . .	1	15	200	3	167	2504	71071	7482	.....	.....	.....	30850	.....	.....	404	.....	1314	.....	245
Colchester. . . . .	.....	.....	.....	.....	87	1899	15095	2743	20	5725	.....	14030	.....	.....	.....	32	2400	.....	40
Cumberland. . . . .	.....	.....	.....	.....	131	3041	6360	3340	2	200	.....	4195	.....	.....	191	.....	278	.....	815
Guysboro'. . . . .	23	706	14850	129	1630	36963	200528	96154	72	9214	488	34655	2970	1040	6732	6000	19921	.....	2613
Halifax. . . . .	92	2185	60625	592	2714	44490	465009	114801	.....	.....	.....	26494	1585	.....	19722	6000	9104	.....	735
Hants. . . . .	.....	.....	.....	.....	103	693	.....	3394	1450	.....	.....	9044	.....	.....	.....	.....	185	.....	185
Pictou. . . . .	1	12	250	2	214	4332	6468	3614	.....	.....	.....	30305	.....	.....	75	.....	303	.....	10
Annapolis. . . . .	15	463	14120	166	223	5100	16390	8320	17	2600	.....	7190	.....	.....	1315	.....	4560	21000	610
Digby. . . . .	56	1453	41750	436	291	7865	40480	29399	34	10225	.....	604	.....	.....	12040	.....	3225	15000	.....
King's. . . . .	7	116	2200	18	88	1675	29440	11065	31	8000	.....	41850	.....	.....	651	.....	3743	84350	2000
Lunenburg. . . . .	169	13836	812400	2344	1603	46615	667463	91591	62	24800	.....	17185	987	.....	20463	.....	23733	.....	592
Queen's. . . . .	11	584	26220	120	418	13245	36779	16642	2	1000	.....	20608	3550	.....	2000	.....	7437	.....	4264
Shelburne. . . . .	51	2508	102925	569	1262	30773	250560	28300	8	15100	.....	15425	.....	.....	4601	4800	14104	.....	1340
Yarmouth. . . . .	59	2763	110320	741	494	4940	51260	15378	17	12050	.....	34000	.....	.....	18485	.....	12255	.....	4345
Totals. . . . .	580	27424	1231575	5782	13344	292760	2244906	573117	265	88914	716	358697	9142	10600	94807	11800	131335	122850	19770

\*Trawls.

## RECAPITULATION by Counties, showing the Number, Tonnage and Value of Vessels, &amp;c.—Nova Scotia—Concluded.

COUNTIES.	KINDS OF FISH.												FISH PRODUCTS.					Value.				
	Cod, cwt.	Cod Tongues and Souds, brls.	Pollock, cwt.	Hake, cwt.	Hake Souds, lbs.	Haddock, cwt.	Haddock, lbs.	Shad, brls.	Bass, lbs.	Trout, lbs.	Squid, brls.	Smelt, lbs.	Eels, brls.	Oysters, brls.	Loobsters, cans.	Loobsters, tons.	Fish Oil, galls.		Fish Guano, tons.	Fish used as bait, brls.	Fish used as man-ure, brls.	
Cape Breton.....	17506	...	...	10	...	2424	18900	6	200	7220	23	24300	278	12	...	311424	...	8172	75	2091	...	
Iverness.....	30712	56	...	1562	2690	2172	1624	...	...	71940	1638	55800	760	1906	...	275977	...	16911	75	4272	935	
Richmond.....	27523	...	...	...	600	3441	3600	...	...	...	3	13000	21	...	...	625840	...	13448	...	35	...	
Victoria.....	31958	...	...	...	...	444	...	...	...	4000	2720	8020	115	1696	...	126624	...	16524	...	1458	...	
Antigonish.....	722	...	...	1972	1973	415	...	...	3080	6000	...	20000	120	220	...	266000	...	1135	...	787	...	
Colchester.....	211	...	...	...	...	37	2875	826	500	3565	...	5000	...	...	...	...	...	127	...	17	...	
Cumberland.....	246	...	114	187	...	316	2332	235	...	2300	...	92958	17	450	1 1/2	402101	...	...	...	420	375	
Guy'sboro'.....	25852	...	156	97	...	10782	18630	600	...	61800	3440	44640	92	...	...	1081232	...	23489	...	5217	364	
Halifax.....	44082	...	1829	6272	11337	5884	91080	...	117	720	1100	...	42750	89	...	1017408	155	15443	...	3141	790	
Hants.....	10	...	...	...	...	2	...	...	...	1300	...	22648	21	40	...	1045030	...	...	...	928	911	
Pictou.....	522	...	...	...	...	...	...	...	...	8650	...	1400	16	...	...	...	60	2247	233	6668	500	
Annapolis.....	5512	41	1857	1442	2900	5077	34195	12	2500	...	...	...	...	...	...	...	...	68002	233	12432	12010	
Digby.....	56129	93	36437	39079	9200	49495	339500	196	...	...	...	...	...	...	...	27680	756	...	...	2355	...	
King's.....	2482	...	1485	...	...	520	3200	601	...	2000	...	5000	6	...	...	...	7	970	...	1035	2855	
Launceburg.....	205137	477	3974	1250	...	19091	221355	16	...	1555	282	6735	167	...	...	293600	...	39781	...	2065	2950	
Queen's.....	12127	50	41	1626	...	1583	20300	41	...	5800	50	25900	103	...	...	219320	130	6821	...	1745	2339	
Shelburne.....	50517	...	4288	1680	...	9523	126900	...	...	11650	...	5000	95	...	...	370508	2321	27962	...	14797	...	
Yarmouth.....	34729	34	6685	310	...	10515	236150	80	...	4100	120	59200	435	...	...	261184	1960	12150	...	4861	3620	
Totals.....	545977	751	56866	55487	28700	121721	1120641	2130760	7600	198180	8286	432351	2335	4318	...	6323628	5390 1/2	253182	383	61969	27949	
																					7,011,300	53

\*The total value of these counties includes also value of fish not enumerated in these columns. See County Returns.



## RECAPITULATION

OF the Yield and Value of the Fisheries of the whole Province of Nova Scotia,  
for the Year 1891.

Kinds of Fish.		Prices.		Quantity.	Value.		Total Value.	
		\$	cts.		\$	cts.	\$	cts.
Salmon, salted.....	Brls.	16	00	716	11,456	00	86,614	20
do fresh.....	Lbs.	0	20	358,697	71,739	80		
do smoked.....	do	0	20	9,142	1,828	40		
do in cans.....	do	0	15	10,600	1,590	00		
Mackerel.....	Brls.	14	00	99,877	1,398,278	00	1,399,694	00
do in cans.....	Lbs.	0	12	11,800	1,416	00		
Herring, pickled.....	Brls.	4	50	131,335	591,009	50	621,722	00
do smoked.....	Boxes	0	25	122,850	30,712	50		
Alewives, salted.....	Brls.	4	50	19,770	88,966	50	89,926	50
do smoked, per 100.....	No.	0	75	120,100	960	00		
Cod, dried.....	Cwt.	4	50	545,977	2,456,899	00	2,464,982	00
do tongues, sounds and roes.....	Brls.			942	8,083	00		
Haddock.....	Cwt.	3	50	121,721	426,023	50	467,295	50
do fresh.....	Lbs.	0	02	74,000	14,800	00		
do smoked.....	Cases.	2	40	10,030	26,472	00		
Hake.....	Cwt.	3	00	55,487	166,461	00	187,984	50
do sounds.....	Lbs.	0	75	28,700	21,523	50		
Pollock.....	Cwt.	3	00	56,866			170,598	00
Halibut.....	Lbs.	0	10	1,120,641			112,063	40
Shad.....	Brls.	10	00	2,130			21,300	00
Bass.....	Lbs.	0	06	7,600			456	00
Trout.....	do	0	10	198,180			19,817	50
Smelts.....	do	0	05	432,341			21,616	75
Squid.....	Brls.	4	00	8,286			33,144	00
Eels.....	do	10	00	2,335			23,350	00
Oysters.....	do	3	00	4,318			12,954	00
Clams in cans and barrels.....							980	00
Lobsters in cans.....	Lbs.	0	14	6,323,628	885,306	98	1,100,926	98
do alive, &c.....	Tons.	40	00	5,390½	215,620	00		
Frost fish.....	Brls.	10	00	150			1,500	00
Scallops.....	Doz.	0	50	400			200	00
Fish oil.....	Galls.	0	40	253,182			101,272	20
do as bait.....	Brls.	1	50	61,969			49,352	50
do as manure.....	do	0	50	27,949			13,975	50
do guano.....	Tons.	25	00	383			9,575	00
Total for 1891.....							7,011,300	53
do 1890.....							6,636,444	64
Increase.....							374,855	89

TABLE showing the Value of Vessels, Boats, Nets, &c., engaged in the Fisheries of Nova Scotia, with an Approximate Value of other Fishing Material for the Year, 1891.

Articles.	Value.	Total.
	\$	\$
580 vessels 27,424 tons .....	1,231,575	
13,344 boats. ....	292,760	
2,244,906 fathoms of nets.....	573,117	
265 weirs and trap nets.....	91,914	
Seines.....	19,600	
Trawls.....	60,696	2,279,662
Lobster canneries.....	213,511	
do traps.....	133,260	346,771
Steamers and smacks.....	28,100	
Smoke houses, etc.....	1,970	
Fishing piers and wharves.....	79,729	109,799
Total.....		2,726,232

STATEMENT of Men employed in the Fishing Industry in Nova Scotia.

Description.	Number.
Sailors .....	5,792
Fishermen.....	18,584
Total .....	24,376

## APPENDIX B.

# NEW BRUNSWICK.

District No. 1, comprising the County of Charlotte.—Inspector, J. H. Pratt, St. Andrews.

District No. 2, comprising the Counties of Ristigouche, Gloucester, Northumberland, Kent and Westmorland.—Inspector, R. A. Chapman, Moncton.

District No. 3, comprising the Counties of Albert, St. John, Kings, Queen's, Sunbury, York, Carleton and Victoria.—Inspector, D. Morrow, Oromocto.

### DISTRICT No. 1.

ANNUAL REPORT ON THE FISHERIES OF DISTRICT No. 1, NEW  
BRUNSWICK, FOR 1891, BY INSPECTOR J. H. PRATT.

ST. ANDREWS, N.B., 31st December, 1891.

Hon. CHARLES H. TUPPER,  
Minister of Marine and Fisheries,  
Ottawa.

SIR,—I have the honour to submit herewith my third annual report of the fisheries of District No. 1, Province of New Brunswick, for the year 1891, together with the tabulated statements of products and values, also synopsis of the reports of the local officers. It is with pleasure that I am able to report an increase in value of \$217,281.09 over last year, as follows:—

Value for 1890.....	\$1,062,756 10
do 1891.....	1,280,037 19
Increase .....	\$ 217,281 09

The past year has been one of prosperity for the fishermen of this district. They have been blessed with favourable weather and good catches and they are now making the necessary preparations for the winter herring and lobster fisheries, and it is to be hoped that success will follow their labours. Prices were good and the demand brisk for all kinds of fish.

With very few exceptions the fishery regulations have been well observed by all fishermen, and each succeeding year less trouble is experienced by the officers in carrying out the various provisions of "The Fisheries Act." The fishermen are finding out that these regulations are not made with the view of oppressing them, but, with the intention of preserving and increasing these various fisheries from which so much wealth is derived. Strangers visiting the fishery villages of this district are surprised at the neat and commodious residences of the large majority of the fishermen, which are fitted up and furnished with remarkable taste, making homes of which no person need be ashamed.

#### DUTY ON FISH FOR UNITED STATES MARKETS.

The enforcement, by the United States, of tariff duties on Canadian fish sent to that market has been the means of embarrassing the operations of our fishermen to a great extent, especially as regards the collection of duties on smoked herring; fair



prices prevailed for all kinds of fish and the market is in a healthy state; but the smoked herring market seems continually glutted, keeping prices and demand down. This would not be felt so much, as the majority of fishermen are inclined to look on the bright side of things; but when a duty of  $3\frac{3}{4}$  cents is demanded for each box of smoked herring sent across the border, it almost crushes the life out of this business. American vessels repairing to our shores to purchase fresh herring for the purpose of smoking them on the American side of the line, have a great advantage over our fishermen, on account of the United States officers allowing those fish to pass free of duty as *the product of the United States fisheries*. While it injures our fishermen in one way, it increases the prices of fish at the weirs and through this competition, weir owners receive better prices for their fish. Various methods have been engaged to remedy this smoked herring difficulty and place our people on an equal footing with their American competitors, but this problem is not any nearer a solution than it was before. Many proposed remedies were found on investigation to be advanced, not for the general good of the community, as it should be, but for the purpose of advancing the business interests of private parties. These were viewed with suspicion by the fishermen and the whole matter will bear further discussion before a solution is arrived at which will be of advantage to the whole fishing population.

#### HERRING.

The failure of the winter school of large herring to strike into the Bay of Fundy last winter, caused large loss to our fishermen. Fishing gear of all kind was placed in proper condition; vessels were overhauled and equipped, trading and fishing crafts were here at anchor with cash ready to purchase the catch, but the long winter passed and not a single school of herring appeared. This entailed heavy loss among a class which is not in a position to afford it; and of course, when herring are scarce, line fish are never found in large numbers. Various theories have been advanced to explain the decrease or total disappearance of the winter schools of herring, but the true reason is still enveloped in mystery.

The young herring, which are used for sardine purposes, frequented the bays and coves of this district in large numbers during the past season. They were more abundant for two years past, than they have ever been for twenty years, in spite of the prediction that they would be utterly exterminated before many years were over. At present there seems to be no immediate cause for alarm regarding the total extinction of these fish, and there does not seem to be any apparent necessity for placing any harassing measures on this industry.

#### ST. CROIX RIVER FISHERIES.

As usual the salmon fisheries of this river suffered from the attacks of a few daring poachers, but only to a slight extent, although a watchful guardian patrolled the banks of the river as in former years. However, this patrol, by unceasing vigilance, has well nigh broken the spirit out of those lawless characters, who in former years almost controlled the St. Croix River fisheries. Poaching is now reckoned by these men to be an undertaking attended with such great risk to their boats and gear, as well as to their personal liberty, that it will soon be a thing of the past. In order, however, to stop it effectually it will be absolutely necessary to have a special guardian to patrol the river during the time when salmon are running. Sportsmen and others, who are interested in this river and have watched it carefully, do not hesitate in stating that it is largely due to the praiseworthy efforts of the guardians if salmon are increasing in it, and if larger numbers were taken by the fly fishermen at the head of the tide.

#### FISHWAYS.

This important subject was given more than usual attention during the past season. A number of expensive fishways have been erected by your department in

this district, and it is naturally expected that they should be managed in such a manner as to give the best results, with as little expense as possible, consistent with their working efficiency. With the exception of the two at the Lower Falls on the Magaguadavic River, and the new ones on the New River, these fishways are in good order, and admirably fulfilling the purpose for which they were built. Those on the Magaguadavic River will be of no benefit till the proposed improvements are made in the dam which was carried away during last spring's freshet. The visit of Inspector Hockin to those fishways last summer, has been productive of much good, and the inhabitants of the St. George district earnestly hope that the contemplated improvements will be made at the earliest opportunity. Salmon and alewives entered the rivers of this district in abundance last season, and with the exception of the Magaguadavic River, and one or two other streams, readily passed up to the spawning grounds.

#### LOBSTERS.

The catch of lobsters during the past season was an excellent one, and coupled with the fact that the demand and prices were good, it caused those who fitted for this branch of the fisheries to feel in pretty good spirits. The lowering of the legal size to 9 inches also tended greatly to increase the catch. As high as 14 cents each were paid by buyers who desired to ship lobsters fresh to the various markets. The increasing importance of this fishery requires that the regulations which control it be enforced as strictly as possible, and it is noticeable how fishermen themselves now take quite an active interest in having this fishery protected. In former years, they seemed to compete against each other in their efforts to destroy this fishery as quickly as possible.

#### MACKEREL.

The increased numbers of mackerel which schooled in the Bay of Fundy during the past season, as compared with 1890, has caused many of our fishermen to rejoice. Most of the mackerel taken were of better quality and of larger size than those of last year and the prices paid for them were fair. These fish met with a ready sale, principally in the American markets.

#### POLLOCK, HADDOCK AND HAKE.

An increased catch is noticed owing partly to a more vigorous prosecution of this fishery and to the large number of schools which visited our shores. Buyers were numerous and the fishermen secured large profits on their catch.

#### TROUT AND SALMON.

Fishing for trout and salmon was prosecuted by local and foreign anglers with great spirit, and good catches were reported. The close seasons were well observed. I did not hear of a single violation of the law except one or two cases of poaching on the river, at St. Stephen.

On the whole, matters progressed very smoothly during the season, and all I ask is to be able in future to make an annual report showing that our valuable fisheries are of the same gratifying nature as they have been during the past season.

### SYNOPSIS OF FISHERY OVERSEERS' REPORTS.

#### CHARLOTTE COUNTY.

*Overseer J. M. Lord* reports as follows: Notwithstanding the scarcity of herring during the past winter, the year has been a prosperous one for the fishermen of this division. The scarcity of herring compelled many, who had hitherto depended upon winter fishing, to engage in the lobster fishery; thus accounting for the great increase in the catch of the latter fish, which is nearly double that of last



year. Good prices were readily obtained. Lobster fishing in cold weather is now carried on by our men in much deeper water. This deep water fishing began when an earlier opening of the season was made. There has been an increase in the catch of all kinds of fish and the fishermen are therefore in good circumstances. The number of boxes of smoked herring put up is largely in excess of that of last year, being nearly five times greater. There was also an increase in the catch of sardine herring at slightly higher prices. There was quite a catch of mackerel, something not seen for years. Most of the fish were salted, while the balance was disposed of fresh. Some of them were canned in Eastport, while many barrels were packed in ice and shipped to the Boston markets where they brought good prices. This officer finds much difficulty in procuring an accurate account of the catch of each fisherman. He suggests that some plan be devised by which they be compelled to keep a correct account and that no bounty be paid until they furnish a full and correct account of their catch, and the prices obtained, with such other particulars as may be required by the officer. Statistics could then be procured which would be almost correct.

*Overseer Wm. Ash* reports that all kinds of fish were more abundant this year than last, except large herring and lobsters. Whilst there was a catch of five million of large winter herring last season which sold frozen, there was none taken this season in his division. Lobsters were abundant, but the falling off in the catch is owing to fewer persons fishing and each person using a fewer number of traps. Line and trawl fishing were good; in fact better than usual. This improvement is, in this officer's opinion, due to the fact that foreign fishermen were kept from poaching in our waters. Sardine herring were very abundant during the last part of the year, but prices ruled low. Several weirs in the western part of this division did exceedingly well, but the lion's share of the profits from this fishery went into the pockets of the Eastport packers. Mackerel struck in much larger schools than for a number of years past, but the fish were of small size. This increase is attributed to the stopping of purse-seining outside, which gives the fish a chance to come inshore. Since the Government placed a steam cutter on the shores of this district, the fishery regulations have been well observed and comparatively little trouble is caused by unruly fishermen.

*Overseer Thomas Barry* states that the heavy freshet of last spring, combined with the ice, completely carried away one of the fishways at the lower fall of the Magaguadavic, together with the dam in which it was built. It should be rebuilt as soon as possible next spring before the alewives begin to run. An extension of fifteen feet is required at the lower end of the lower ladder, as fish cannot possibly get into the fishway at present excepting at high water during spring tides. Fish were seen in abundance at the foot of the falls during the season. Trout were abundant in the lakes and streams of this division, but they were mostly used for home consumption, and afforded pleasure to a large number of sportsmen. No signs have been noticed of any young salmon from the thousands of fry placed in the head waters of the Magaguadavic River during several years past. The fishways at Upper Mills and Linton Stream were in good order, when last inspected.

*Overseer Barth. Brown* reports a slight falling off in the catch of all kinds of fish in his division, with the exception of hake and pollock, which show a large increase. This increase he attributes in a large measure to Americans being kept strictly away from the grounds, and not being allowed to destroy them as they were wont to do in the days of free fishing. Line fishermen never did so well as they did last season. They are well pleased with the season's operations. Large herring for pickling were very scarce, and for some unknown reason the schools for winter herring did not strike the shores of this division. The catch of sardine herring was poor, but good hauls of herring for smoking were made. However, on account of the heavy duty levied on these fish when being sent into United States markets, very little money was cleared by the fishermen who put them up. Lobsters gave an average catch with not quite so many persons engaged in the business as here-



tofore. Mackerel were quite abundant in the fall, and several weirs made good hauls. The fish were of good size, and commanded good prices. The close seasons were well observed. Owing to the fishing grounds of this division being so near the boundary line, they were in years gone by over-run by United States fishermen, but this is all changed now; foreigners are kept out, and the consequences are apparent. The grounds are not uncomfortably crowded with vessels and boats, and good hauls are made by every one.

*Overseer Duncan F. Campbell* reports that the season, as a whole, was poor. On account of the failure of the winter school of herring, some hardships were experienced by the fishermen, especially those who have no share in the sardine weirs. Owing to the poor results realized by weirs during the past two years, there were fewer of them repaired and fished than for several seasons past. Few of those that were fished met with great success, not because of any scarcity of fish, for small herring were never more abundant, but on account of the large catches of small herring around Campo Bello and West Isles. When fish strike near Eastport and good hauls are made, boatmen will not come to St. Andrew's for them. From the appearance of things during the past season, it does not seem as if the sardine fishery was diminishing the supply of herring to any appreciable extent. Quite a run of small mackerel appeared in this division during the past season, but the fish were of a poor quality. Most of them sold fresh for canning purposes, and the rest were salted. Lobster fishing was not so good as in 1890, but the fish were much larger, and brought better prices. Several fishermen in this district object to winter lobster fishing, claiming that it is an injury to the fishery. Others claim that in the winter a larger number of female lobsters are killed than in the summer. They all agree, however, that while the size of the fish has increased the number has decreased. It is the general opinion, that it would benefit this fishery if winter lobster fishing were prohibited, and the open season made to run from 1st March to 31st July. Line fishing was fair, and the catch was disposed off for home consumption. Land-locked salmon in the Chamcook Lakes seem to increase, but they are shy and hard to raise. During the months of May and June numbers of sportsmen had good sport. Very little trouble has been had with the fishermen of this division, and but few violations of the law occurred. The presence of a steam cruiser patrolling these waters keeps unruly fishermen in check, and makes the overseer's work easier.

*Overseer W. B. McLaughlin* reports a good catch of all kinds of fish in his division. Cod, pollock, hake, herring and halibut were abundant, and although not quite as many men were engaged in fishing as in former years, the quantity caught was equal to that of last year, and the prices obtained were better. Lobster fishing was much better than last season, although only a small number of traps were set and fewer men were engaged in it. Very high prices were obtained for the catch during the season, with ready sales. The reappearance of mackerel schools in Grand Manan waters was of great financial benefit to the weir fishermen. More than 2,000 barrels of fine mackerel were taken and brought good prices in the markets. The herring fishery was a great success, excepting at the North Head. All the weirs fished extremely well, and nearly 2,000,000 boxes of herring were put up. Several hogsheds of them were sold fresh to sardine factories, while cargoes were sent to Gloucester and Eastport for smoking purposes. Large herring struck at Three Islands early in September, and a large fleet from New Brunswick and Nova Scotia had a splendid catch till late in November of large fat fish. After leaving Three Islands, the fish struck in at White Head, and big hauls were made there, selling at \$5 per hogshed. Attention is directed to the injurious and slovenly habit of fishermen leaving their gill nets in the water day and night. This matter has been reported upon several times before, and continued observation still strengthens *Overseer McLaughlin's* belief that it has a most injurious effect on the inshore fisheries. Herring come inshore early in September, seek their birthplace and lie on the bottom for rest, not for feeding purposes. Winter gales drive them from Grand Manan to sheltered places near the mainland, where they hibernate on the bottom till spring, returning then to the open sea very poor in quality. While

hibernating, the herring eats nothing, and if not disturbed will scarcely move till spring. Having watched them for more than fifty years, Overseer McLaughlin recommends that Grand Manan spawning grounds and St. Andrew's Bay be set apart for herring to hibernate in and allow no gill nets to be set in these two places. During the last year that Americans were permitted to fish in our waters, a large fleet of vessels were using gill nets, and herring were pursued so fiercely that they were driven from the Bay of Fundy, and, excepting in small schools, have never returned. Gill nets break up the large schools of herring, fence them out of their favourite resorts and keep them off shore. After this is done, net fishermen will invariably hold the brush weirs responsible for the disappearance of the herring. It is therefore strongly urged that gill net fishing during day time be prohibited. The fishery regulations were well observed in this division. This was mainly due to the presence of an armed vessel continually cruising in these waters. Weir fishermen now apply for their licenses in advance of fishing or rebuilding. This is of great assistance to an overseer. Quite a number of fishermen have left this Island and settled in the United States, where most of them are faring worse.

*Overseer Frank Todd* reports very little change in his division. Salmon were abundant and afforded good fly fishing. This overseer went up nearly the whole length of the river by canoe and found the pools apparently well stocked with salmon. No poaching occurred above tide-water, and very little there, but to wholly prevent this illegal practice, a night watchman's services are urgently needed at the head of tide during the season. Sardine herring were abundant at Oak Bay weirs, but few were sent to the market, the distance to Eastport canneries being so great. This officer believes that the taking of so many young herring for sardine purposes will result in the near future very disastrously to our herring fisheries. The fish-ways are all in good order, and have been kept open during the season.

I have the honour to be, Sir,

Your obedient servant,

JOHN H. PRATT,

*Inspector of Fisheries District No. 1.*



## DISTRICT No. 2.

REPORT ON THE FISHERIES OF DISTRICT No. 2, COMPRISING THE COUNTIES OF RESTIGOUCHE, GLOUCESTER, NORTHUMBERLAND, KENT AND WESTMORELAND, FOR THE YEAR 1891, BY INSPECTOR R. A. CHAPMAN.

MONCTON, N.B., 31st December, 1891.

Honourable CHARLES TUPPER,  
Minister of Marine and Fisheries,  
Ottawa.

SIR,—I have the honour to submit my report for the year 1891, on the fisheries of District No. 2, in the Province of New Brunswick, with extracts from the reports of local fishery officers; also, tabulated statements giving the product and values by districts and counties, together with an estimate of the capital employed in the prosecution of these fisheries. The returns show a large increase above previous years, and compared with last year the figures are:—

1891.....	\$2,075,392 47
1890.....	1,445,194 82

An increase of ..... 630,197 65

or upwards of forty per cent. While there has been a gain in almost every branch, it was much the largest on the coast, especially in mackerel and lobsters. The pack of the latter amounted to nearly half a million dollars, notwithstanding heavy storms during the latter part of June which so seriously damaged this fishery.

## SHAD.

There is a considerable increase in this fishery, but no permanent improvement can be expected until the parent fish are protected on their way to the spawning grounds by a regulation not allowing them to be caught before the 20th June.

## SALMON.

The returns show a fair increase in the catch of this fish, especially on the Miramichi. This would have been much greater, especially in the estuary of this river, but for the storm in June which tore up the nets and interfered materially with the fishing. The overseers and guardians on all the salmon rivers report large numbers of fish ascending to the spawning grounds, and the marked increase on the Miramichi for the past two years would show that the amount spent for guardianship has not been wasted.

## HERRING

were abundant, as usual, just after the ice left the coast in the spring, and large quantities were taken for food and bait. Fall fishing is not prosecuted to any great extent in this district, or a much larger quantity of good fish could and ought to be taken.

## SMELTS.

A very large catch of these fish is reported; nearly 900,000 lbs. more than last year. The size was good and the weather favourable for sending them to market. The revenue derived from the sale of smelts is a great boon to the inhabitants of many districts, coming as it does in the winter season when there is little or no employment.



## COD.

A good catch of this staple fish was made, notwithstanding the rough weather experienced and the scarcity of bait in some localities. There seems to be no limit in the extent to which this fishery might be prosecuted.

## HAKE.

The catch of hake was more than twice that of last year.

## HALIBUT.

There was reported a phenomenal increase in the catch of this fish, so much so that I thought there must be some mistake. I wrote to the overseer returning the largest quantity, and he replied, that his returns were correct.

## MACKEREL.

These fish were very abundant on our coasts, yielding a catch about six times larger than that of last year, and this with very little preparation on the part of the fishermen.

## TROUT.

There is also a large return of trout this year, and, although the fishing has been very much better than usual, I believe that this increase may be to some extent accounted for by fuller returns.

## LOBSTERS.

I have again to report a marked increase in the pack of this fish aggregating nearly one million cans, and being nearly double that of 1889. As a large number of new factories are going up this fall all along the coast, there is some danger of overfishing and no extension of time should be granted.

## OYSTERS.

There is a falling off in the yield of this shell fish from last year, principally in the Caraquet beds which are being choked up by sediment and mud. This prevents the enlargement of the beds, and much spat is lost.

## SYNOPSIS OF FISHERY OVERSEERS' REPORTS.

## RESTIGOUCHE COUNTY.

*Overseer J. A. Verge* reports the catch of salmon in the River Division about the same as that of last year in proportion to the number of nets set. The Sunday close time was generally well observed.

*Overseer A. McPherson*, of the Coast Division, has no improvement to report in the catch of salmon. While more fish were caught in some localities, the total weight taken is somewhat less than that of last year. The catch of lobsters was fair and owing to the better prices obtained was profitable to both fishermen and packers.

## GLOUCESTER COUNTY.

*Overseer Fred. Comeau* reports the catch of salmon in his district about the same as last year. Lobsters, a little better, which is undoubtedly due to a strict observance of the regulations during the past few years. There is a large increase in the catch of cod, owing to a more vigorous prosecution of this fishery.

*Overseer James Hickson* states that the season was a rough one on the coast of his division. The catch of salmon was about the same as that of last year. Mackerel was above the average. Cod and herring are staple fish, and it only needs a little extra expenditure and exertion to double or treble the catch at any time. The anglers report fair sport on the Nepissiguit. The shortening of the season will have a good effect.

*Overseer J. D. Thériault* reports fair fishing in his district.

*Overseer Joseph L. Haché* reports that fishing was good in his district. There was, however, a great falling off in the yield of oysters.

*Overseer X. D. Albert* reports very fair fishing; a large increase in cod and a larger catch of herring than last year.

*Overseer Adolphe Aché* states that codfishing was better than last year. Prices also ruled higher than heretofore, so that, on the whole, the fishermen have fared very well. Codfish were abundant, but bait was scarce. Mackerel were in much greater abundance than for some time past, and prices were higher. Lobsters were very abundant up to the last week in June when a big storm destroyed a large number of traps, virtually closing the fishery on the outside or Gulf shore. On the inside, they were abundant up to the close of the season and of good size; fair prices were realized.

*Overseer A. Boyd* states that the lobster fishery regulations were well observed during the past season by packers. The pack was much better than during the previous year. Prices also ruled higher and general satisfaction is expressed at the season's labour. The catch of codfish also exceeded that of last year and better prices were obtained. The spring herring fishery was not so good as before, but the fall catch was better. Mackerel were also more abundant. On the whole the fishermen are satisfied with their catch. The laws and regulations were well observed.

*Overseer Wm. Walsh* reports spring herring very abundant and of good quality. There were plenty of codfish, but rough weather and scarcity of bait interfered with the catch to a great extent. Mackerel struck in abundance, and all the available boats and flats went into the business. The catch of alewives exceeded that of last year, and the fish were of very good quality. This overseer recommends a close season beginning on the 20th instead of the 30th June, as at present, as after the 20th the fish are spent and of very little value and the trout come in from the sea and are liable to be caught in the nets. He also recommends that the nets of fishermen be marked so that the fishery officer may know who the owners are. The take of smelts compares favourably with that of previous years, and the fish were of much better size. The fishery regulations were on the whole well observed.

*Overseer Oliver Robichaud* states that fishing in his division was good, except during the last part of June and the first part of July, when the weather became so stormy that lobster packers lost nearly all their traps. This virtually closed the fishery on the 24th June. Still there is an increase in the yield over 1890. Smelts were abundant and of large size, but fewer persons engaged in this fishery than usual. Herring were very abundant and large quantities were caught. Alewives also appeared in great numbers. There was a good catch of salmon during the first part of the season, but the storms of the latter end of June destroyed a great many nets; notwithstanding which there is an increase in the catch. Mackerel were very abundant and kept inshore for over three months so that a large quantity were caught.

#### NORTHUMBERLAND COUNTY.

*Overseer P. Robichaud* reports that herring were abundant this spring and that large quantities were caught for home use and bait. Codfishing was an average one. Salmon fishing very good, but owing to the big storm in June, the fishermen lost a great quantity of nets and much more time. Lobster fishing was very good; in fact, better than for many years past. The first were of good size, but during the June storm the fishermen lost the best portion of their traps. Mackerel appeared early, and in abundance. Good catches were made and remunerative prices obtained. Smelt fishing was good; these fish were of a much larger size than the year before.

*Overseer J. G. Williston* states that salmon were more numerous than in 1890; still the returns do not show a very great increase, owing to a very destructive storm which prevailed during the latter part of June. Mackerel were much more abundant than during the previous year; the freezers at Escuminac are all full. Alewives



appeared in great numbers. These fish have been increasing ever since seining was prohibited. Smelts appeared in great numbers and were of a much larger size than the year before. The oyster beds are still very productive, but fewer fishermen from other localities engaged in this fishing as formerly. The close season should be from 1st May to 1st October. The early fall fishing is of no benefit to the people and considerable quantities spoil. Lobsters were uncommonly plentiful and of splendid size. It is very gratifying to see this fishery coming back to what it was in the olden times. There was, however, very little fishing after the big storm of last June, when traps and rigging were so badly damaged. Packers believe in a strict enforcement of the close time and other regulations. The guardians on Bay du Vin and Black Rivers rendered valuable assistance in guarding salmon on the spawning grounds during the month of October, when these rivers were alive with fish. The regulations and close seasons were well observed.

*Overseer L. H. Abbott* reports an increase in the catch of salmon, which is the principal fish of his district.

*Overseer Thomas Parker* also reports a much larger catch of salmon in the South-west Miramichi River, one of the great spawning grounds of this fine fish.

*Overseer Patrick Hogan* states that the catch on the North-west Miramichi River was double that of last year and greater than for five or six years past. He also reports large numbers of salmon going up the main river and its tributaries this fall. This speaks well for the guardianship which has been maintained for the past two or three years.

#### KENT COUNTY.

*Overseer P. L. Richard* reports a very large catch of all the staple kinds of fish in his district; but as this is his first year as a fishery officer, he is not prepared to make comparisons between this and former years.

*Overseer W. F. Hannah* states that the average yield of his division was much better this year than last. Mackerel were very abundant and sold for remunerative prices. Lobsters show a good catch and fair size. The extension did not do much good in this district; a very large number of traps having been destroyed by storm about the end of June.

*Overseer M. A. Girouard* reports a good year's fishing, with a marked increase in the catch of lobsters and mackerel. The yield of oysters in Buctouche Bay was better this fall than usual.

*Overseer Charles Cormier* writes that fishing is in a healthy state in his division generally. Mackerel and alewives were more abundant than last year, and the close seasons and regulations were well observed.

#### WESTMORELAND COUNTY.

*Overseer W. B. Deacon* reports as follows: In 1888, there were thirteen lobster factories in operation in my district; in 1889, fifteen; in 1890, thirty-five; this year fifty-eight, and a number of new factories are being built for next year's operations. The catch this season was fair, but I think that next year's fishing will show the heavy drain made on the fish this year. Smelts yielded fair returns.

*Overseer Robert Goodwin* reports that fish of all kinds were abundant in the waters of his division during the past season, although the catch may not appear large for the reason that the residents do not take advantage of this very remunerative branch of industry. Mackerel were very abundant in Bay Verte during the months of August and September. Gaspereaux or alewives are on the increase in all the rivers and creeks of this division.

*Overseer Denis T. Cormier* reports an increase in the catch of shad, but claims that no permanent and general improvement can be secured until a close time to 25th June has been established, in order to give the fish time to spawn before they are caught.

I have the honour to be, Sir,

Your obedient servant,

R. A. CHAPMAN,

Inspector of Fisheries for District No. 2, N.B.



## DISTRICT No. 3.

REPORT ON THE FISHERIES OF DISTRICT No. 3, COMPRISING THE COUNTIES OF VICTORIA, CARLETON, YORK, SUNBURY, QUEEN'S, KING'S, ST. JOHN AND ALBERT, FOR THE YEAR 1891, BY INSPECTOR DAVID MORROW.

OROMCTO, 31st December, 1891.

Hon. CHARLES H. TUPPER,  
Minister of Marine and Fisheries,  
Ottawa.

SIR,—I have the honour to submit my report on the fisheries of District No. 3, New Brunswick, for the year 1891, together with condensed reports from local fishery officers and tabulated statements of products and values. The yield for the year shows an increase in value of \$24,516.94, compared with the returns of 1890. The prices of fish having been high, fishermen have had a profitable year, and in most localities have shown a disposition generally to observe the fishery regulations.

## SALMON.

The returns show an increase in the catch of salmon over that of last year of 161,402 lbs. The fishermen along the St. John point out the difference between the native St. John River salmon and those from the fry planted in the river, natives of other waters. This should be ample proof of the success attending the planting of fry in the rivers and lakes of this district. Since the prohibiting of nets for the capture of salmon in non-tidal waters, a few fishermen along the River St. John will break the regulations when they get an opportunity to do so. In consequence of this, several seizures of nets were made last season. Thorough protection and strict observance of the close season under the present regulations will soon show beneficial results.

## BASS.

There has been a gradual decrease in the catch of this fish for some time past. For years they came almost entirely from King's County. This year the fishery at Belle Isle Bay, formerly so productive, proved a failure. The only way of restoring this fishery to its original state appears to be complete prohibition for a number of years.

## ALEWIVES.

These fish show an increase as compared with the catch of last year. The close time of Friday night until Monday morning is evidently having a beneficial effect.

## SHAD.

There is an increase in the catch of shad of 325 brls. over that of last year. The bay fishery shows better results than for the past three years. Albert County returns 120 brls. as compared with 10 brls. in 1890, and 25 brls in 1889. It is probable that on the River St. John and its tributaries, this fishery has about attained the limit of expansion; and care will have to be exercised, as far as practicable, in order that the amount of fishing does not exceed the limit of production. The steady increase of these fish caused the fishermen to increase the number of nets. This year on the Washademoak, within a distance of twenty miles there were 300 nets, when formerly from 100 to 200 would be the outside number.

## PICKEREL AND PERCH.

The catch of these fish shows a slight falling off. This is owing to the fisheries not being prosecuted so energetically as heretofore. The fish are abundant, and command good prices.

## COD, POLLOCK, HAKE AND HADDOCK.

There is an increase of the above-named fish in the aggregate.

## HERRING.

The catch of herring is still falling off. In 1890 eighteen vessels from St. John were engaged in this fishery, which proved a failure and discouraged the fishermen. This year only five vessels have been so employed. Herring appear to have left the north shore of the Bay of Fundy, above Point Lepreaux.

## LOBSTERS.

The returns show a small increase over the take of last year. This fishery which was much exhausted is now showing signs of improvement. It is being conducted with much care by the fishermen.

## SYNOPSIS OF OVERSEERS' REPORTS.

## ALBERT COUNTY.

*Overseer S. Stewart* says that fish were more abundant in the bay this season than for some time past. Large numbers of small mackerel were taken. Shad was quite abundant. Fishing was not prosecuted to such an extent as formerly. The close season was fairly well observed. The fish-way at Upper Salmon River was kept open, and salmon and trout passed through. Salmon come late into the rivers of this division, and this overseer recommends that the close season for the upper part of the bay begin on the 15th of September, instead of the 15th of August.

## CARLETON COUNTY.

*Overseer A. G. Lindsay* reports the catch of fish in this district to have been smaller than usual. Of the 126 miles of water in this district the Canadian Pacific Railway Company own about 100 miles of the best waters for fishing. They have a collector of tolls for fishing, and as a consequence fishermen mostly kept away; result, much smaller catch than usual, as every part of this district is a succession of bars on which salmon and sea trout spawn. Anything that reduces the catch on the spawning grounds ought to be gratifying with a view of restoring this river to its former place as one of the best salmon streams. An experienced and enthusiastic fly fisherman after two seasons passed on these waters assured the overseer that this district for salmon and sea trout could not be excelled.

## YORK COUNTY.

*Overseer Robert Orr* reports that the St. Croix River, which is the boundary between the State of Maine and New Brunswick, is also, for a portion of its length, the western boundary of York County. The Americans allow no net fishing on their side, but the Canadian side is quite a resort for net fishing by United States citizens as well as by provincialists. This causes friction, and it would be as well to adopt the America idea in regard to this river, and prohibit the capture of fish by nets in the non-tidal waters. On the St. John River shad and salmon were abundant this season. This unusual quantity of salmon caused considerable illegal fishing, and several seizures of nets were made in non-tidal waters. On the portion of the Southwest Miramichi running through York County there was considerable poaching. The "Burnt Hill Salmon Club" is the only one that employs guardians. The only



way poaching can be prevented is by appointing one or two guardians to assist those employed by the clubs. The overseer should also make visits not less than once a month as far up as the county line. Two men are now at large against whom warrants were issued for violations of the law committed on this river. It is upward of a year since these warrants were issued and no arrests have yet been made. Cains River, from its confluence with the Miramichi for about 40 miles, is in Northumberland County, the remaining portion is in York. Salmon do not enter this stream to spawn until early in September; a number of salmon are speared or netted every fall. It is well known that parties formerly went through from the St. John River with nets, seining the pools. A large number of fish have been taken that way. The overseer went through last season, under instructions, to investigate this matter, but when he got there the water was high and it was near freezing time. Information was, however, obtained that convinced him that much illegal fishing is done in that section. Texas River, from its confluence with the South-west Miramichi, for one mile lies in Northumberland County, the remainder is in York. Spearing is carried on at the mouth of this river quite openly. A guardian should be placed on this river near the county line.

## SUNBURY COUNTY.

*Overseer G. W. Hoben* reports that shad and alewives are on the increase; the latter particularly were, this season, much more abundant than in ordinary years. The catch for export was much larger. Fishing in this division is on the increase and is becoming an important industry. The greatest complaint is about the close season. The harbour of St. John has one close season, and the country districts another. All along the St. John it is very difficult to keep the Friday night close time, otherwise the fishery laws are well observed. Salmon are on the increase, and these fish should be afforded all needed protection after they arrive on the spawning grounds. Bass are becoming quite scarce from overfishing in Belle Isle Bay. These fish congregate and lay there during the winter season.

## QUEEN'S COUNTY.

*Overseer I. T. Hetherington* reports that shad and gaspereaux were about as abundant as last year, although the run was not so heavy, but the season lasted longer. There was a rise of water in Canaan River during shad fishing which enabled a large number of fish to reach the spawning grounds in safety. Pickerel are not so numerous nor so large as formerly. They are evidently being fished out. No net should be allowed to take them with meshes less than three inches extension measure. Trout appear to be on the increase. Eels are always abundant; they were not fished for in this division this year. Salmon have been more abundant in Washademoak Lake and Canaan River, than for years past. Warden Phillips reports them very abundant in Canaan River and several farmers living along the banks of the river, who do not fish, state that they never saw so many for a number of years in the river. A fish new to the waters is being caught at the range, which they cannot name. From what I hear they are no doubt whitefish. Shad fishing is being overdone evidently, considering the extent of the waters they frequent for the purpose of depositing spawn: there ought to be some restrictions enforced. Drifting in Washademoak Creek and the narrows should be prohibited.

## KING'S COUNTY.

*Overseer Samuel Goseline* reports alewives abundant in the bay as well as in Darling's Lake during May, and the catch shows a slight increase over that of the previous year. Shad were about the same as last year, but neither shad nor alewives struck in such abundance as formerly. This is attributed to low water and the cold north and north-east winds which blew in May and June. Salmon did not reach their spawning grounds until the heavy rains of the latter part of August gave them a chance to do so, and there were not as many as last year. The salmon fry in the



streams this season was nearly double that of the last five years. In other kinds of fish, there was no perceptible difference. The principal abuses in this division arise from sawdust and mill rubbish. Long nets are used as seines in Darling's Lake to sweep the coves, landing the fish on the beach. This spawning ground should be closed against fishing during the season.

ST. JOHN COUNTY.

*Overseer Jos. O'Brien* reports an increase in nearly every kind of fish in his division. Salmon were abundant and prices good. This was a great boon to the fishermen. Alewives show better than during last year; 1,500 barrels were sold for bait. These fish sold well; shad fishing was good. Lobsters show an increase over last year and better prices prevailed. Fishermen comply better with the regulations than formerly. They see the advantage of it. Line fishing was good, although bait was scarce through the season. The herring fishery was a great failure in winter and summer. The prospect is not reassuring for the coming winter. The destruction of young fish down the bay and the high rate of inspection drove the fine fleet of fishing vessels off the waters. It is to be hoped that the Department will make some regulation to prevent this wholesale destruction of herring, or it will soon be something of the past. A regulation to prevent weirs from destroying young alewives is much needed.

*Guardian Splane*, of Pisarinco, says the number of boats fishing for salmon from Partridge Island to Dipper Harbour is about 80. They averaged a good season's catch. Fall shad fishing commenced about the 1st of August; there are from 12 to 15 boats engaged in this fishery, from the Island to Musquash. This was a good fall for shad fishing, and the above boats caught from 40,000 to 50,000, while the season lasted. The opinion of the fishermen is that no spring shad are caught on their way back from spawning, they would easily know them as they would be poor and slim; all the fall fish are plump and very fat.

I have the honour to be, Sir,

Your obedient servant,

DAVID MORROW,  
*Inspector of Fisheries District No. 3.*

NEW BRUNSWICK—District No. 1.

RETURN showing the Number, Tonnage and Value of Vessels and Boats engaged in the Fisheries; Quantity and Value of Fishing Material; Kinds and Quantities of Fish, and the Total Number of Men Employed, &c., in District No. 1, of the Province of New Brunswick, for the Year 1891.

No.	District No. 1.	VESSELS AND BOATS EMPLOYED IN FISHING.						FISHING MATERIAL.				KINDS OF FISH.					
		Vessels.			Boats.			Nets.	Weirs.		Lobster Traps.	Mackerel, fresh, in ice, lbs.	Mackerel, brls.	Mackerel, in cans.	Herring, brls.	Herring, frozen, per 100.	Herring, smoked, in boxes.
		Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.
1	West Isles.....	7	126	3050	31	246	9840	268	79	35550	2256	1128	445	.....	669	.....	89535
2	St. Croix.....	.....	.....	.....	.....	5	450	.....	5	1000	.....	400	111	.....	20	.....	1500
3	Magaguadavic.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
4	Passamaquoddy.....	1	18	300	8	70	2100	80	28	8400	858	858	283	.....	.....	.....	1000
5	Beaver Harbour.....	21	250	10500	84	157	3925	200	76	8000	2260	1635	532	.....	2036	.....	28850
6	Grand Manan.....	14	270	5000	40	450	40000	565	33	33000	3000	3000	2000	.....	10000	.....	1854000
7	Campo Bello .....	21	339	8700	82	140	6259	206	31	12400	866	389	513	7000	2616	.....	228100
	Totals.....	64	1003	27550	240	1068	62574	1319	252	98350	9240	7070	3834	7000	15341	1000000	2202985

Return showing the Number, Tonnage and Value of Vessels and Boats engaged in the Fisheries; Quantity and Value of Fishing Material, &c., District No. 1, of Province of New Brunswick, in the Year 1891—Concluded.

KINDS OF FISH.																	FISH PRODUCTS.				VALUE.	WHERE MARKETING.		
Alewives, brls.	Cod, cwt.	Cod Tongues and Sounds, brls.	Pollack, cwt.	Hake, cwt.	Hake Sounds, lbs.	Haddock, cwt.	Halibut, lbs.	Trout, lbs.	Frost fish, lbs.	Flounders, lbs.	Smelt, lbs.	Pickarel, lbs.	Eels, brls.	Sardines, hogs.	Lobsters, tons.	Lobsters, cans.	Fish Oil, galls.	Fish Guano, tons.	Fish used as bait, brls.	Fish used as manure, brls.	\$	cts.	Canadian, West Indian and United States markets.	
1229	4526	3137	3021	1462										15206	70			3460	8	450	200	140,662 50		
75														5	178			300	9			4,307 50		
30																						270 00		
	100																					18,338 00		
	2812																	4855	75	2000	2000	149,733 50		
5545																						21000		
12000	12																					8000 5000		
																						1310 207		
1221	3326																	9054				158,409 69		
105	20095	12	22764	25892	27280	8730	132000	7000	2300	11000	4900	1500	5	33615	553		31056	38669	92	11760	7407	1,189,841 19		
Home consumption, clams and canned goods.....																						90,136 00		
Total value .....																						1,279,977 19		



# RECAPITULATION of the Yield and Value of the Fisheries of District No. 1, New Brunswick, for the Year 1891.

Kinds of Fish.	Quantity.	Price.		Value.	
		\$	cts.	\$	cts.
Salmon, fresh, in ice.....	Lbs. 400	0	20	80	00
Mackerel, fresh, for canning.....	Hgds. 242	8	00	1,936	00
do salt.....	Brls. 3,834	14	00	53,676	00
do canned.....	Cans. 7,000	0	12	840	00
Herring.....	Brls. 15,341	4	50	69,034	50
do frozen, per 100.....	No. 1,000,000	0	75	7,500	00
do smoked.....	Boxes. 2,202,985	0	25	550,746	25
Alewives.....	Brls. 105	4	50	472	50
Cod.....	Cwt. 20,095	4	50	90,427	50
do tongues and sounds.....	Brls. 12	10	00	120	00
Pollock.....	Cwt. 22,764	3	00	68,292	00
Hake.....	" 25,872	3	00	77,616	00
do sounds.....	Lbs. 27,280	0	75	20,460	00
Haddock.....	Cwt. 8,730	3	50	30,555	00
Halibut.....	Lbs. 132,000	0	10	13,200	00
Trout.....	" 7,000	0	10	700	00
Frost fish.....	" 2,300	0	05	115	00
Flounders.....	" 11,000	0	05	550	00
Smelt.....	" 4,900	0	05	245	00
Pickarel.....	" 1,500	0	05	75	00
Eels.....	Brls. 5	10	00	50	00
Sardines.....	Hgds. 33,615	4	50	151,267	50
do canned.....	Cans. 400,000	0	05	20,000	00
Finnan haddies, canned.....	" 20,000	0	12	2,400	00
Lobsters.....	Tons. 533	40	00	22,120	00
do canned.....	Cans. 31,056	0	14	4,347	84
Fish oil.....	Galls. 38,669	0	40	15,467	60
do guano.....	Tons. 92	25	00	2,300	00
do used as bait.....	Brls. 11,760	0	50	5,880	00
do do manure.....	" 7,407	0	50	3,703	50
do consumed in each district.....	Cwt. 16,000	4	00	64,000	00
Clams.....	Brls. 300	6	00	1,800	00
Total, 1891.....				1,279,977	19
do 1890.....				1,062,756	10
Increase.....				217,221	09

## NUMBER and Value of Vessels, Boats, Nets, Weirs, &c., engaged in the Fisheries of District No. 1, New Brunswick.

Material.	Value.	Total.
	\$ cts.	\$ cts.
64 Vessels, 1,003 tons.....	27,550 00	
1,068 Boats.....	62,574 00	
50,326 Fathoms of nets.....	30,844 00	
252 Weirs.....	98,350 00	
9,240 Lobster traps.....	7,070 00	226,388 00
2 Sardine and lobster factories combined.....	4,000 00	
1 Fertilizing factory.....	40,000 00	
3 Ice-houses.....	750 00	
965 Smoke and fish-houses with fixtures.....	148,261 00	
84 Oil presses with fixtures.....	5,295 00	
327 Trawls.....	13,760 00	
218 Weir seines.....	70,500 00	282,566 00
Total value.....		508,954 00

## NEW BRUNSWICK—District No. 2.

RETURN showing the Number, Tonnage and Value of Vessels and Boats engaged in the Fisheries; Quantity and Value of Fishing Material; Kinds and Quantities of Fish, and the Total Number of Men Employed, &c., in District No. 2, Province of New Brunswick, for the year 1891.

DISTRICT.	VESSELS AND BOATS EMPLOYED IN FISHING.					FISHING MATERIAL.						KINDS OF FISH.											
	Vessels.			Boats.		Nets.		Weirs, Smelt Nets.		Lobster Traps.		Salmon, fresh, in ice, lbs.	Salmon, smoked, lbs.	Salmon, in cans, lbs.	Mackerel, brls.	Mackerel, in cans.	Herrings, brls.	Herrings, smoked, in boxes.	Alewives, brls.	Cod, cwt.	Cod Tongues and Souuds, brls.	Pollock, cwt.	
	Tonnage.	Value.	Men.	No.	Value.	Value.	No.	Value.	No.	Value.	No.												Value.
<i>Restigouche Co.</i>																							
Dalhousie to head of tide.....	32		480	32		7500						39080											
Dalhousie to Belle- dune .....	100		1500	150		15500			5	100	3500	300	87800		22000		200			120			
Total .....	132		1980	182		23000			5	100	3500	300	126880		22000		200			120			
<i>Gloucester Co.</i>																							
Petit Rocher.....	450		6700	1200		15000			2	40	1500	1500	50000			10	40000	4000		5000			
Bathurst, &c. ....	270		5100	510		15787			13	300	9800	9800	300996			840	3500	3500	225	6900			
Grande Anse.....	2	64	1000		8	240	4600	675	6000	1800	25000					800	3200	3200		3900			
Upper Caraqueet.....	50		15000	150		3100			16	400			18070			120	2000	2000		6800			
Caraquet.....	36	120	36000	286		6200			4	100	1500	1500			800	400	10300	10300		13602	7		
Shippegan .....	35	1600	15	174	34800	579	2800	1900			35	700	1000	4000		150	2400	1340	5000	3900			
Shippegan Island.....	24	293	14300	78	143	11235	324	9700	4800		2	60	10300	10300		504	12500	5079	400	9300			
Miscou.....	3	48	1800	10	96	4800	200	2400	1200			9600	2880	7500		450	400	400	400	3840			
Pokenouche .....	2	25	1500	6	210	7300	450	17500	1050		80	2400	300	12800		2440	2400	2600	570	1860	10		
Tracadie.....	4	48	1600	14	65	1300	146	3200	3200		58	580	3400	3400	480	170	9520	3500	560	1800			
Total .....	47	653	27200	107	1818	126835	4520	81687	55743	25000	210	4580	44590	37670	3720	4885	66820	36519	1355	58002	20		

NEW BRUNSWICK—District No. 2—Continued.

Return showing the Number, Tonnage and Value of Vessels and Boats engaged in the Fisheries, &c.—Continued.

DISTRICT.	KINDS OF FISH.														FISH PRODUCTS.				VALUE.				
	Hake, cwt.	Hake, Sounds, lbs.	Halibut, lbs.	Sturgeon, lbs.	Shad, brls.	Bas, lbs.	Trout, lbs.	Frost fish, lbs.	Squid, brls.	Flounders, lbs.	Smelt, lbs.	Pickarel, lbs.	Perch, lbs.	Eels, brls.	Oysters, brls.	Lobsters, tons.	Lobsters, cans.	Fish Oil, galls.		Fish Guano, tons.	Fish used as bait, brls.	Fish used as man-ure, brls.	
Restigouche Co.							10000										6	70500					
							1000				10000									400	200		
							11000				10000						6	70500		400	200		
	Totals.																						
Gloucester Co.																							
Totals.	6741	6040	2002	243775	250	30	6220	10200	8900	22	2500	430720	20	110	110	1174	45	909987	22260	45	23300	20500	871,629 08



## NEW BRUNSWICK—District No. 2—Continued.

Return showing the Number, Tonnage and Value of Vessels and Boats engaged in the Fisheries, &amp;c.—Continued.

DISTRICT.	VESSELS AND BOATS EMPLOYED.				FISHING MATERIAL.						KINDS OF FISH.													
	Vessels.		Boats.		Nets.		Weirs.		Smelt Nets		Lobster Traps.		Salmon, fresh, in ice, lbs.	Salmon, Smoked, lbs.	Salmon, in cans, lbs.	Mackerel, brls.	Mackerel, in cans.	Herring, brls.	Herring, Smoked, in boxes.	Alewives, brls.	Cod, cwt.	Cod Tongues and Sounds, brls.	Pollock, cwt.	
							Value.	No.	Value.	No.	Value.	No.												Value.
	No.	Tonnage.	Value.	Men.	No.	Value.	Men.	Value.	No.	Value.	No.	Value.	No.											
Northumberland Co.																								
Neguac Tabusintac, &c.	4	90	1550	9	150	4000	400	45964	45964	107	3200	2600	2600	99736	200	3000	2000	260	500					
Bay du Vin, &c.	6	213	6390	35	120	2400	120	8844	8844	191	5730	7000	7000	134260	450	1300	1850	240	400					
Chatham, &c.										343	11905			95000	446	109		400	310					
South-west Miramichi								1100	1100	40	3200			66980	1880				826					
North-west Miramichi								1136	1136					41520					800					
Totals.	10	303	7940	44	380	29900	740	68644	61744	40	3200	641	20835	9600	437496	2030		1096	4409	3850	2686	1210		
Kent Co.																								
Hartcourt, &c.					5	175	15																	
St. Louis, &c.					170	7000	480	10000	7000	120	4000	12000	12000	36500	3500	6000			130	3000		35	120	
Richibucto, &c.	6	103	3000	24	198	7920	396	14800	5350	91	3400	7900	6320	12500	890	6000			1200	2940		21		
Buctouche, &c.					236	4750	372	16555	6310	202	5756	9208	9208	2759	2759	8400			1330	80		58		
Cocagne					200	5084	400	12000	6000	47	940	5400	5400		200	668			480	215				
Totals.	6	103	3000	24	809	24925	1663	53855	24660	460	14096	34508	32928	49000	7349	16068			3230	6235		56	178	

NEW BRUNSWICK—District No. 2.—Continued.  
RETURN showing the Number, Tonnage and Value of Vessels and Boats engaged in the Fisheries, &c.—Continued.

District.	KINDS OF FISH.														FISH PRODUCTS.				VALUE.				
	Hake, cwt.	Hake, Sounds, lbs.	Haddock, cwt.	Halibut, lbs.	Sturgeon, lbs.	Shad, brls.	Bass, lbs.	Trout, lbs.	Frost fish, lbs.	Squid, brls.	Flounders, lbs.	Smelt, lbs.	Pickarel, lbs.	Perch, lbs.	Eels, brls.	Oysters, brls.	Lobsters, tons.	Lobsters, cans.		Fish Oil, galls.	Fish Guano, tons.	Fish used as bait, brls.	Fish used as manure, brls.
<i>Northumberland Co.</i>																							
Neguac Tabusintac, &c.	140	...	...	400	...	...	...	2000	...	...	50000	472300	...	...	150	...	...	49840	...	500	...	900	1500
Bay du Vin &c.	400	...	100	2000	...	100	...	1000	50000	...	50000	624745	...	...	30	10000	...	144000	...	140	250	3000	1000
Chatham, &c.	...	...	...	...	...	...	...	2000	160000	...	9000	960000	...	...	13	700	...	...	...	...	...	300	4000
South-west Miramichi	...	...	...	...	...	...	...	1600	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
North-west Miramichi	...	...	...	...	...	25	...	7000	...	...	...	...	...	...	33	...	...	...	...	...	...	...	...
Totals	540	...	100	2400	...	125	...	13600	210000	...	59000	2057045	...	...	226	10700	...	103840	...	640	250	4200	6500
<i>Kent Co.</i>																							
Hartcourt, &c.	2100	2000	245	1500	...	15	1000	11000	4500	...	3700	475400	8000	...	100	100	...	320000	...	1150	...	2800	...
St. Louis, &c.	3300	6000	1500	2400	...	10	1300	1750	8400	...	28000	697000	2500	...	240	440	...	280000	...	780	...	2140	400
Richibucto, &c.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Buctouche, &c.	360	380	...	...	...	...	450	1878	3750	...	19375	321550	...	...	58	1910	...	270520	...	249	...	3460	...
Cocagne	25	...	100	...	...	...	250	900	6500	...	1000	133100	...	...	50	560	...	274144	...	75	...	2750	...
Totals	5785	8980	1845	3900	...	25	3000	20528	23150	...	52075	1627250	8000	2500	448	3010	...	1150673	...	2254	...	11150	400

NEW BRUNSWICK—District No. 2—Continued.  
RETURN showing the Number, Tonnage, and Value of Vessels and Boats engaged in the Fisheries, &c.—Continued.

District.	VESSELS AND BOATS EMPLOYED IN FISHING.				FISHING MATERIAL.						KINDS OF FISH.														
	Vessels.			Boats.		Nets.		Weirs.		Smelt Nets.		Lobster Traps.		Salmon, fresh, in ice, lbs.	Salmon, Smoked, lbs.	Salmon, in cans, lbs.	Mackerel, brls.	Mackerel, in cans.	Herring, brls.	Herring, Smoked, in boxes.	Alewives, brls.	Cod, cwt.	Cod Tongues and Sounds, brls.	Pollock, cwt.	
	No.	Tonnage.	Value.	Men.	No.	Value.	Men.	No.	Value.	No.	Value.	No.	Value.												
<i>Westmorland Co.</i>																									
Shediac & Botsford.					700	10000	1400	7500			150	3000	35000	30000	400			150	1920	10000		100	20		
Westmorland and Sackville.					24	650	48	3900	1700		15	300			1250			25		2500	800	600			
Dorchester, &c.					29	1740	69	7500	3490	2	80				2728					50			30		
Total					753	12390	1517	24400	12690	2	80	165	3300	35000	4378			175	1920	12550	800	700	50		
Grand total for Dis- trict No. 3.	63	1059	38140	235	3892	196030	8622	251086	177837	44	8280	1481	42011	127198	113198	1087360	2030	25720	13505	84808	73522	4650	7971	65617	76 178



## NEW BRUNSWICK—District No. 2—Continued.

Return showing the Number, Tonnage and Value of Vessels and Boats engaged in the Fisheries, &amp;c.—Continued.

DISTRICT.	KINDS OF FISH.													FISH PRODUCTS.				VALUE.					
	Hake, cwt.	Hake, Sounds, lbs.	Haddock, cwt.	Halibut, lbs.	Sturgeon, lbs.	Shad, brls.	Bass, lbs.	Trout, lbs.	Frost fish, lbs.	Squid, brls.	Flounders, lbs.	Smelt, lbs.	Pickarel, lbs.	Perch, lbs.	Eels, brls.	Oysters, brls.	Lobsters, tons.		Lobsters, cans.	Fish Oil, galls.	Fish Guano, tons.	Fish used as bait, brls.	Fish used as man-ure, brls.
Westmorland Co.	.....	.....	.....	.....	.....	.....	1200	800	6000	40	2000	434000	.....	.....	150	50	200	974064	.....	.....	6854	1000	227,162 36
Shediac & Botsford,	.....	.....	.....	.....	.....	.....	500	1100	5000	.....	.....	110617	.....	.....	6	.....	2	.....	.....	.....	1500	300	26,210 85
Westmorland and	.....	.....	.....	.....	.....	.....	755	1000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8,555 60
Sackville, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dorchester, &c. ....	.....	.....	.....	.....	.....	.....	1055	2900	11000	40	2000	544617	.....	.....	156	50	202	974064	.....	.....	8354	1300	261,928 81
Total .....	.....	.....	.....	.....	.....	.....	1700	58228	253050	62	115575	4669632	8000	2520	940	14934	253	3299064	25154	295	47404	28900	2,075,392 47
Grand total for Dis- trict No. 3. ....	13066	15020	3947	250075	250	1235	10920	58228	253050	62	115575	4669632	8000	2520	940	14934	253	3299064	25154	295	47404	28900	2,075,392 47

RECAPITULATION

Of the Yield and Value of the Fisheries in District No. 2 New Brunswick, for the Year, 1891.

Kinds of Fish.		Quantity.	Price.	Value.
			\$ cts.	\$ cts.
Salmon, fresh	Lbs.	1,087,360	0 20	217,472 00
do smoked	"	2,030	0 20	406 00
do in cans	"	25,720	0 15	3,858 00
Mackerel	Brls.	13,505	14 00	189,070 00
do	Lbs.	84,808	0 12	10,176 96
Herring	Brls.	73,522	4 50	330,849 00
do smoked	Boxes.	4,650	0 25	1,162 50
Alewives	Brls.	7,971	4 50	35,869 50
Cod	Cwts.	65,617	4 50	295,276 50
Cod tongues and sound	Brls.	76	10 00	760 00
Pollock	Cwts.	178	3 00	534 00
Hake	"	13,066	3 00	31,198 00
do sounds	Lbs.	15,020	0 75	11,265 00
Haddock	Cwts.	3,947	3 50	13,814 50
Halibut	Lbs.	250,075	0 10	25,007 50
Sturgeon	"	250	0 10	25 00
Shad	Brls.	1,235	10 00	12,350 00
Bass	Lbs.	10,920	0 06	655 20
Trout	"	58,228	0 10	5,822 80
Frostfish	"	253,050	0 05	12,652 50
Squid	Brls.	62	4 00	248 00
Flounders	Lbs.	115,575	0 05	5,778 75
Smelts	"	4,669,632	0 05	233,481 60
Pickarel	"	8,000	0 05	400 00
Perch	"	2,520	0 03	75 60
Eels	Brls.	940	10 00	9,400 00
Oysters	"	14,934	3 00	44,802 00
Lobsters	Tons.	253	40 00	10,120 00
do	Cans.	3,299,064	0 14	461,868 96
Fish oil	Galls.	25,154	0 40	10,061 60
do guano	Tons.	295	25 00	7,375 00
do as bait	Brls.	47,404	1 50	71,106 00
do as manure	"	28,900	0 50	14,450 00
Total				2,075,392 47

NUMBER and Value of Vessels, Boats, Nets, Weirs, Traps, &c., engaged in the Fisheries in District No. 2, New Brunswick, in the Year, 1891.

Material.	Value.	Total.
	\$ cts.	\$ cts.
63 Vessels (aggregate tonnage 1,059)	38,140 00	
3,892 Boats	196,030 00	
251,086 Fathoms nets	177,837 00	
44 Weirs	8,280 00	
1,481 Smelt nets	42,911 00	
127,198 Lobsters traps	113,198 00	
2 Mackerel traps	2,000 00	578,396 00
8 Salmon and Mackerel Canneries	3,500 00	
143 Lobster Factories	138,500 00	
40 Freezers	40,000 00	
80 Ice Houses	15,000 00	
10 Smoke Houses and fixtures	2,500 00	
5 Oil presses and fixtures	600 00	
Total		200,100 00
Total		778,496 00

NEW BRUNSWICK—Continued—District No. 3.

RETURN showing the Number, Tonnage and Value of Vessels and Boats engaged in the Fisheries, Quantity and Value of Fishing Material, Kinds and Quantities of Fish, and the Total Number of Men Employed, &c., in District No. 3, of the Province of New Brunswick, in the Year 1891.

DISTRICTS.	VESSELS AND BOATS EMPLOYED IN FISHING.						FISHING MATERIAL.		KINDS OF FISH.					VALUE.	
	Vessels.			Boats.			Nets.		Shad, barrels.	Trout, lbs.	Pickarel, lbs.	Perch, lbs.	Eels, barrels.		
	No.	Tonnage.	Value.	Men.	No.	Value.	Men.	Fathoms.							Value.
<i>Victoria County.</i> Rivers St. John, Madawaska and Tobique. . . . .					50	\$ 500	75	240	\$ 240	2,000	25	1,000	1,000	10	\$ cts. 1,630 00
					14 25	280 300	28 50	500 500	250 250	1,000 6,000	10,000 8,000			5	1,200 00 2,450 00
					39	580	78	500	250	7,000	40	18,000		5	3,650 00
<i>York County.</i> St. Croix river and lakes. . . . . Magaguadavic stream and lakes. . . . . York county line to Sunbury county line. . . . . South-West Miramichi. . . . .					45	1,300	90	2,000	800	4,000		7,500	5,000	10	2,025 00 100 00 4,150 00 1,100 00
					50 10	1,000 200	100 30	2,500 .....	1,000 .....	15,000 3,500	110	1,000			
					105	2,500	220	4,500	1,800	22,500	110	8,500	5,000	10	7,375 00



## NEW BRUNSWICK—District No. 3—Continued.

RETURN showing the Number, Tonnage and Value of Vessels and Boats engaged in the Fisheries; Quantity and Value of Fishing Material, &c.—Continued.

DISTRICT.	VESSELS AND BOATS EMPLOYED IN FISHING MATERIAL.						KINDS OF FISH.										VALUE.				
	Vessels.			Boats.			Nets.			Salmon, fresh, in ice, lbs.	Alewives, brls.	Hake, cwt.	Shad, brls.	Bass, lbs.	Trout, lbs.	Pickarel, lbs.		Perch, lbs.	Eels, brls.		
	No.	Tonnage.	Value.	Men.	No.	Value.	Men.	Fathoms.	Value.												
Sunbury County.	1	12	130	3	20	200	40	1,000	500	100	460	.....	45	.....	400	10,000	.....	.....	.....	\$	cts.
	.....	.....	.....	.....	10	100	20	500	400	800	462	.....	10	.....	.....	1,000	.....	.....	.....	3,080	00
	.....	.....	.....	.....	10	100	15	400	200	.....	126	.....	25	.....	200	4,000	.....	.....	.....	2,389	00
	.....	.....	.....	.....	10	120	20	300	300	.....	110	.....	.....	.....	500	6,000	1,000	.....	.....	1,037	00
	.....	.....	.....	.....	8	120	15	300	300	.....	40	.....	.....	.....	600	.....	.....	.....	.....	875	00
Totals.	1	12	130	3	58	640	110	2,500	1,700	900	1,198	.....	80	.....	1,700	21,000	1,000	.....	.....	240	00
Queen's County.	.....	.....	.....	.....	10	100	20	400	200	.....	40	.....	30	.....	.....	1,000	.....	.....	.....	7,621	00
	.....	.....	.....	.....	10	100	20	350	150	.....	50	.....	15	.....	.....	6,000	500	.....	.....	480	00
	.....	.....	.....	.....	5	50	10	200	100	250	35	.....	10	.....	.....	500	.....	.....	.....	425	00
	.....	.....	.....	.....	10	100	15	400	200	650	30	.....	25	.....	.....	500	.....	.....	.....	622	50
	1	12	120	3	10	100	20	450	250	100	85	.....	30	.....	1,300	45,000	4,500	.....	.....	540	00
Totals.	1	12	120	3	210	3,150	420	13,500	5,400	1,000	1,155	.....	735	1,000	1,300	45,000	4,500	.....	.....	727	50
King's County.	.....	.....	.....	.....	505	3,600	505	15,300	6,300	1,000	1,395	.....	845	1,000	1,300	53,000	5,000	.....	.....	15,122	50
	.....	.....	.....	.....	56	560	71	3,040	1,175	15,300	1,200	20	177	14,089	500	29,000	500	.....	.....	17,917	50
	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35	25	125	.....	600	3,000	500	5	.....	12,635	34
	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	45	302	14,089	1,100	32,000	500	5	.....	1,757	50
	Totals.	.....	.....	.....	56	560	71	3,040	1,175	15,300	1,235	45	302	14,089	1,100	32,000	500	5	.....	14,392	84

NEW BRUNSWICK—DISTRICT No. 3—Continued.

RETURN showing the Number, Tonnage and Value of Vessels and Boats engaged in the Fisheries; Quantity and Value of Fishing Material, &c.—Continued.

DISTRICT.	VESSELS AND BOATS EMPLOYED IN FISHING.						FISHING MATERIAL.						KINDS OF FISH.				
	Vessels.			Boats.			Nets.		Weirs.		Lobster Traps.		Salmon, fresh, in ice, lbs.	Mackerel, barrels.	Herring, barrels.	Herring, smoked, in boxes.	
	No.	Tonnage.	Value.	Men.	No.	Value.	Men.	Fathoms.	Value.	No.	Value.	No.					Value.
St. John County. St. John Harbour and Bay of Fundy. Martins.	5	100	2000	20	264	9240	528	132000	99000	28	10500	4050	4050	180360	2000	40000	
					4	80	7	120	60			30	30		35		
	5	100	2000	20	268	9320	535	132120	99060	28	10500	4080	4080	180360	2035	40000	
					3	150	6	500	175	2	50			600	40	35	
Alber County.								158700	110700	30	10550	4080	4080	229660	2070	40100	
Grand Total for District No. 3.																	
DISTRICT.	KINDS OF FISH.																
	FISH PRODUCE.																
	Alwives, brls.	Cod, cwt.	Cod Tongues and Sounds, brls.	Pollock, cwt.	Hake, cwt.	Haddock, cwt.	Halibut, lbs.	Shad, brls.	Bass, lbs.	Trout, lbs.	Pickarel, lbs.	Perch, lbs.	Eels, brls.	Lobsters, tons.	Fish Oil, galls.	Fish used as bait, barrels.	VALUE.
St. John Harbour and Bay of Fundy. St. Martins.	1500	1108	18	1425	1400	1200	200	3200		1600			95	115	648	1500	160,222 20
		20		15		15								1			565 00
	10500	1128	18	1440	1400	1215	200	3200		1600			95	116	648	1500	160,787 20
								120		2000							2,307 50
Alber County.		10						4722	15089	44700	115500	12500	125	116	648	1500	215,681 04
Grand Total for District No. 3.																	

# RECAPITULATION of the Yield and Value of the Fisheries of District No. 3, New Brunswick.

Kinds of Fish.	Quantity.	Price.		Value.
		\$	cts.	\$ cts.
Salmon, fresh.....	Lbs. 229,660	0	20	45,932 00
Mackerel.....	Brls. 40	14	00	560 00
Herring.....	" 2,070	4	50	9,315 00
do smoked.....	Boxes. 40,100	0	25	10,025 00
Alewives.....	Brls. 14,328	4	50	64,476 00
Cod.....	Cwt. 1,138	4	50	5,121 00
Cod Tongues and Sounds.....	Brls. 18	10	00	180 00
Pollock.....	Cwt. 1,440	3	00	4,320 00
Hake.....	" 1,445	3	00	4,335 00
Haddock.....	" 1,215	3	50	4,252 50
Halibut.....	Lbs. 200	0	10	20 00
Shad.....	Brls. 4,722	10	00	47,220 00
Bass.....	Lbs. 15,089	0	06	905 04
Trout.....	" 44,700	0	10	4,470 00
Pickarel.....	" 115,500	0	05	5,775 00
Perch.....	" 12,500	0	03	375 00
Eels.....	Brls. 125	10	00	1,250 00
Lobsters.....	Tons. 116	40	00	4,640 00
Fish Oil.....	Galls. 648	0	40	259 20
Fish used as bait.....	Brls. 1,500	1	50	2,250 00
Total, 1891.....				215,681 04
do 1890.....				191,104 10
Increase. ....%				24,576 94



RECAPITULATION by Counties, showing the Number, Tonnage and Value of Vessels and Boats engaged in the Fisheries, &c.—  
**New Brunswick—Continued.**

COUNTIES.	VESSELS AND BOATS EMPLOYED IN FISHING.						FISHING MATERIAL.						KINDS OF FISH.	
	Vessels.			Boats.			Nets.		Weirs.		Smelt Nets.		Lobster Traps.	
	Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Fathoms.	Value.	Number.	Value.	Number.	Value.	Number.
Restigouche .....	47	653	27200	167	132	1980	182	23000	23000	2	5000	5	100	3500
Gloucester.....	10	303	7940	44	1818	126835	4520	81687	55743	2	5000	210	4580	44590
Northumberland .....	6	103	3000	24	809	24925	1663	53355	61744	40	3200	641	20835	3600
Kent.....					753	12390	1517	24400	24660	2	80	460	14096	34508
Westmorland .....					3	150	6	500	12690	2	50	165	33000	30000
Albert.....					268	9320	535	132120	99069	28	10500			4080
St. John.....	5	100	2000	200	56	560	71	3040	1175					180360
King's.....	1	12	120	3	255	3600	505	15300	6300					15300
Queen's.....	1	12	130	3	58	640	110	2500	1700					1000
Sunbury .....					105	2500	220	4500	1800					900
York.....					39	580	78	500	250					22500
Carleton.....					50	500	75	240	240					7000
Victoria.....	64	1003	27550	240	1068	62574	1319	50326	30844	252	98350	9240	7070	2000
Charlotte.....					5794	276454	11541	460112	319381	326	117180	1481	42911	400
Totals.....	134	2186	67940	681	5794	276454	11541	460112	319381	326	117180	1481	42911	1317420
														2030



RECAPITULATION by Counties, showing the Number, Tonnage and Value of Vessels and Boats engaged in the Fisheries, &c.—  
New Brunswick—Concluded.

COUNTIES.	KINDS OF FISH.											FISH PRODUCTS.				VALUE.	\$ cts.
	Trout, lbs.	Frost Fish, lbs.	Squid, barrels.	Flounders, lbs.	Smelt, lbs.	Pickarel, lbs.	Perch, lbs.	Eels, barrels.	Sardines, hqds.	Oysters, barrels.	Lobsters, tons.	Lobsters, cans.	Fish Oil, gallons.	Fish Guano, tons.	Fish used as bait, barrels.	Fish used as manure, barrels.	
Restigouche .....	11000	8900	22	2500	10000	..	20	110	..	1174	6	70500	..	..	400	200	42,526 00
Gloucester .....	10200	210000	..	59000	430720	..	..	226	..	10700	45	909987	22260	45	23300	20300	871,629 08
Northumberland .....	13600	20528	..	52075	2057045	..	..	448	..	3010	..	193840	640	250	4200	6500	340,260 05
Kent .....	20528	23150	..	2000	1627250	8000	2500	156	..	50	202	1150673	2254	..	11150	400	550,048 53
Westmorland .....	2960	11000	40	..	544617	..	..	..	..	..	..	974064	..	..	8854	1300	261,928 81
Albert .....	2000	..	..	..	..	..	..	95	..	..	116	..	648	..	1500	..	2,307 50
St. John .....	1600	..	..	..	..	32000	500	5	..	..	..	..	..	..	..	..	160,787 20
King's .....	1100	..	..	..	..	53000	5000	..	..	..	..	..	..	..	..	..	14,392 84
Queen's .....	1300	..	..	..	..	21000	1000	..	..	..	..	..	..	..	..	..	17,917 50
Sunbury .....	1700	..	..	..	..	8500	5000	10	..	..	..	..	..	..	..	..	7,621 00
York .....	11000	..	..	..	..	..	1000	5	..	..	..	..	..	..	..	..	7,375 00
Carleton .....	18000	..	..	..	..	1000	1000	10	..	..	..	..	..	..	..	..	3,650 00
Victoria .....	8000	..	..	..	..	1500	..	..	..	..	..	..	..	..	..	..	1,630 00
Charlotte .....	7000	2300	..	11000	4900	..	..	5	33615	..	553	31056	38669	92	11760	7407	1,279,977 19
Totals .....	109928	255350	62	126575	4674532	125000	15020	1070	33615	14934	922	3330120	64471	387	60664	36307	3,571,050 70



# RECAPITULATION of the Yield and Value of the Fisheries of the Whole Province of New Brunswick, 1891.

Kinds of Fish.		Prices.	Quantity.	Value.	Total.
		\$ cts.		\$ cts.	\$ cts.
Salmon, fresh.....	Lbs.	0 20	1,317,420	263,484 00	267,748 00
do smoked.....	do	0 20	2,030	406 00	
do in cans.....	do	0 15	25,720	3,858 00	
Mackerel, salted.....	Brls.	14 00	17,379	243,306 00	256,258 96
do in cans.....	Lbs.	0 12	91,808	11,016 96	
do fresh.....	Hgds.	8 00	242	1,936 00	
Herring, salted.....	Brls.	4 50	90,933	409,198 50	978,632 25
do fresh, frozen.....	per 100	0 75	1,000,000	7,500 00	
do smoked.....	Bxs.	0 25	2,247,735	561,933 75	
Alewives.....	Brls.	4 50	22,404	.....	100,818 00
Cod.....	Cwt.	4 50	86,850	390,825 00	391,885 00
Cod tongues and sounds.....	Brls.	10 00	106	1,060 00	
Haddock.....	Cwt.	3 50	13,892	.....	
Pollock.....	do	3 00	24,382	.....	48,622 00
Hake.....	do	3 00	40,383	121,149 00	73,146 00
do Sounds.....	Lbs.	0 75	42,300	31,725 00	155,274 00
Haddies, finnan, in cans.....	do	0 12	20,000	2,400 00	
Halibut.....	do	0 10	382,275	.....	
Sturgeon.....	do	0 10	250	.....	38,227 50
Shad.....	Brls.	10 00	5,957	.....	25 00
Bass.....	Lbs.	0 06	26,009	.....	59,570 00
Trout.....	do	0 10	109,928	.....	1,560 54
Frost fish.....	do	0 05	255,350	.....	10,992 80
Squid.....	Brls.	4 00	62	.....	12,967 50
Flounders.....	Lbs.	0 05	126,575	.....	248 00
Smelts.....	do	0 05	4,674,532	.....	6,328 75
Pickarel.....	do	0 05	125,000	.....	233,726 60
Perch.....	do	0 03	15,020	.....	6,250 00
Eels.....	Brls.	10 00	1,070	.....	450 60
Sardines.....	Hgds.	4 50	33,615	151,267 50	10,700 00
do in cans.....	Lbs.	0 05	400,000	20,000 00	171,267 50
Oysters.....	Brls.	3 00	14,934	.....	
Clams.....	do	6 00	300	.....	
Lobsters, in cans.....	Lbs.	0 14	3,330,120	466,216 80	44,802 00
do alive or fresh.....	Tons.	40 00	922	36,880 00	1,800 00
Fish oil.....	Galls.	0 40	64,471	.....	503,096 80
do as bait.....	Brls.	.....	60,664	.....	25,788 40
do as manure.....	do	0 50	36,307	.....	79,236 00
do guano.....	Tons.	25 00	387	.....	18,153 50
Home consumption in Dist. No. 1, not included above.....					9,675 00
Total for 1891.....					64,000 00
do 1890.....					3,571,050 70
Increase.....					2,699,055 02
					871,995 68

TABLE showing the value of Vessels, Boats, Nets, etc., engaged in the Fisheries of  
**New Brunswick**, with approximate value of other fishing material, not  
 included in the Statistical Returns, 1891.

ARTICLES.	Value.	Total Value.
	\$ cts.	\$ cts.
134 vessels, 2,186 tons.....	67,940 00	
5,794 boats.....	276,454 00	
460,112 fathoms of nets.....	319,381 00	
326 weirs.....	117,180 00	
2 mackerel traps.....	2,000 00	
1,481 smelt nets.....	42,911 00	
		825,866 00
140,518 lobster traps.....	124,348 00	
143 lobster factories.....	138,500 00	
		262,848 00
8 fish canneries.....	3,500 00	
2 sardine factories.....	4,000 00	
327 trawls.....	13,760 00	
218 seines.....	70,500 00	
40 freezers.....	40,000 00	
83 ice-houses.....	15,750 00	
965 smoke and fish-houses, with fixtures.....	150,761 00	
89 oil presses, with fixtures.....	5,895 00	
1 fertilizer factory.....	40,000 00	
		344,166 00
Total.....		1,432,880 00

## STATEMENT OF MEN ENGAGED FISHING IN NEW BRUNSWICK.

Men in vessels.....	681
Fishermen in boats.....	11,541
Total.....	12,222

## APPENDIX C.

## PRINCE EDWARD ISLAND.

REPORT ON THE FISHERIES OF PRINCE EDWARD ISLAND FOR 1891,  
BY INSPECTOR EDWARD HACKETT.

TIGNISH, PRINCE EDWARD ISLAND,

31st December, 1891.

Hon. CHARLES H. TUPPER,  
Minister of Marine and Fisheries,  
Ottawa.

SIR,—I have the honour to submit my annual report on the fisheries of Prince Edward Island for the year 1891, with tabulated statements, giving catch and values by counties. These statements show that the total value of the catch during the season just closed amounts to the sum of \$1,238,733.81, being an increase over the year 1890 of \$197,624.61. There has been a steady increase in the value of the catch in this district for the last four years, as may be seen on reference to the following table:—

Year.	Value of catch.
1888.....	\$ 876,862 74
1889.....	886,430 84
1890.....	1,041,109 20
1891.....	1,238,733 81

This appreciable increase proves beyond doubt that the valuable fisheries of our coastal waters are under wise regulations and careful protection, being restored to their original state of productiveness.

Notwithstanding the severe winter of 1891, the spring opened early, and fishermen at many points around the coast had traps set and lobsters landed in the last week of April, which may be looked upon as an early date to commence this fishery.

The lobster fishery was prosecuted with great energy, and shows an increase of 1,253,620 lbs. over last season.

Herring struck the coast about the middle of May, but at several places these fish did not appear in their usual abundance, consequently in a number of cases fishermen could not secure bait, thereby rendering that article scarce during the season. Codfishing was not prosecuted with vigour, owing to two causes—scarcity of bait and scarcity of cod. This fish was not abundant, and the catch shows a falling off of 1,912 cwts. as compared with 1890.

Mackerel show an increase of 650 barrels over the previous year. These fish were not so large nor so fat as in 1890, and the prices realized were not so high. Oysters show an increase of 5,827 barrels. This fishery, although actively prosecuted, continues very productive, the beds in Richmond Bay showing no signs of exhaustion. More extended details in connection with the different branches of fishing on the coastal waters and in the inland fisheries are given below.



## HERRING.

The herring fishery of this district, while of no great importance from a commercial point of view, is yet of immense value, affording, as it does generally, an ample supply of bait for the lobster and mackerel fisheries. This season the fish were not so abundant on certain parts of the northern coast as in years past, and, as a result, bait was scarce and difficult to obtain. This fact materially affected the lobster fishery, and several packers closed their factories about the end of June, as they could not afford to pay the high prices asked for bait. The run of fish known as "spring herring" is small and thin, and they are not put up for export.

Schools of large fat fish strike the coast in the fall, but little or no attention is paid to them, as the fishermen prefer to follow mackerel, &c.

## LOBSTERS.

Lobster fishing was most successfully prosecuted in the waters of this district during the season just closed.

This valuable crustacean was found in great abundance at all points around the coast. During the early part of the season they were of good size, and in excellent condition for packing, but towards the 15th of July they began to run small and became inferior in quality. The ice left the coast early and some lobsters were landed at Miminigash, on the north side, on the 29th of April. The factories generally commenced packing about the 10th of May, which is considered an early date inside the Gulf. High prices, and the prospect of a good season's fishing, induced people to make large preparations and considerable additions were made to the plant. One hundred and forty-two factories were in operation, as against ninety-eight in 1890, being an increase of fifty-four factories. About 138,000 traps were used, an increase of 42,000 over the previous year. The quantity canned was 3,670,414 lbs. as against 2,416,794 lbs. in 1890; an increase of 1,253,620 lbs. The production per trap, was equal to  $26\frac{1}{2}$  one-pound cans, or about  $1\frac{1}{2}$  one-pound cans more per trap than in 1890. This slight increase per trap, is undoubtedly due to the fifteen days extension of the season which was taken advantage of by about eighty packers on the south side. It is evident that if all the factories had closed on the 15th of July, as was done in 1890, the production per trap would have been much less than during the previous year. This shows that the fishery, while improving under the shortened fishing season and increased protection, cannot stand the enormous drain put upon it by the use of so large a number of traps. At the present time, extensive preparations are being made for next season, and I estimate that at least fifty more factories will be in operation in 1892, than in 1891. This will bring the number of factories to 200, working altogether about 200,000 traps. Averaging six lobsters to fill a one pound can, about 22,000,000 lobsters were killed during the season just closed, to make up the total pack. With the increased appliances to be used in 1892, and allowing each trap to capture the same number of lobsters as in 1891; at least 30,000,000 will be required to supply the canneries next season.

The fecundity of the lobster is amazing; each female it is said, producing from twelve to twenty thousand eggs in a season, thus hatching out tens of millions of young lobsters around our shores each year. Under these circumstances, one would suppose it to be almost impossible to exhaust the fishery. Experience, however, has proved the contrary, and as the lobster fishery in the Gulf of St. Lawrence was very much depleted by overfishing a few years ago, great care will be required in the future to prevent it relapsing into the same condition. In this connection, I note with pleasure, the proposed new regulations which are intended to bring this valuable fishery more directly under the control of the officers of your department.

## COD.

Cod shows a falling off of 1,912 cwts. as compared with the previous year. Cod were scarce in this district during the whole season. This may be attributed chiefly to the want of bait, but the fish also were not in their usual abundance, which no doubt accounts for the deficiency in the catch. This fishery is not actively pursued, fishermen preferring to follow the mackerel and other fisheries.

## MACKEREL.

There is nothing special to note in connection with this fishery; the catch being only slightly in advance of last year. There is a decrease in the quantities taken in Queen's and King's Counties, but Prince County shows an increase. Mackerel is a very unsteady and erratic fish, and it is difficult to account for their presence in large bodies at any particular place. The fish were not so large nor so fat as in 1890, and lower prices prevailed. Fish did not school on the surface and seining therefore proved a failure. Hook and line fishermen were fairly successful, especially in the vicinity of Tignish and Nail Pond, in Prince County, where some good catches were made. The rapid decline of this fishery has led to much speculation as to the cause of it. Fishermen and others who have studied the question attribute the falling off to the use of purse seines and gill nets. The Act passed at the last session of Parliament prohibiting the use of purse seines in our territorial waters, is favourably viewed by almost all parties interested, and it is hoped that further action will be taken shortly to restrict the use of gill nets in the mackerel fishery.

## OYSTERS.

Oysters show an increase of 5,827 barrels over last year. This fishery was vigorously prosecuted and proved very successful. Stormy weather about the last of October prevented fishing for awhile, but this had the effect of increasing the demand and raising prices, thus eventually benefitting the fishermen. The oyster fishery has exhibited no change for some years past, the beds in Richmond Bay, Grand River, and the Narrows yielding the usual quantity, although incessantly raked during the fishing season. The product is sold in the other Provinces of Canada, chiefly in Ontario and Quebec.

Fishing through the ice is becoming an established industry here and if allowed to continue, will result in great injury to the fishery. This practice has only been introduced within the last few years, and its bad effects are not yet apparent. There is a strong feeling against this mode of fishing, entertained by those who are interested in the preservation of the beds.

Mr. Venantius S. Gillis, one of the most intelligent guardians on Richmond Bay, writing me a few days ago on this subject, states:—

"I have also to state that as soon as the ice on Richmond Bay was strong enough to bear a person, there were several crowds out oyster fishing.

"The method used in winter fishing destroys the ground, so far as oysters are concerned, for a great many years, if not for ever. They use a machine, like a common hand rake, with curved iron teeth in the head and with a handle about forty feet long. With this they scrape the bottom in a circle all around the hole cut in the ice, bring mud, oysters, &c., in a heap directly under the opening, and then fish the oysters up with the common tongs or rakes. To tear up the bottom in this way destroys the oysters. The oyster grounds should be rigidly protected, as the oysters are a large revenue to poor people and others. The season for fishing is too long and will, in a very few years, exhaust the beds by over fishing. The only way, I can see, that they can be saved, is to stop the winter fishing and extend the close season until the 1st of October in each year. I have been speaking to several of the fishermen and they concur in the same idea."

In addition to the destruction complained of by Mr. Gillis, large quantities of immature oysters are destroyed each year. These small oysters are landed by the fishermen, and being unfit for export, are rejected by the buyers, and thrown in heaps to rot. I would earnestly recommend that a regulation be adopted by the department, fixing a minimum size, under which no oysters should be landed, also one prohibiting winter fishing.

Several of the foreshores on the bays and rivers of this province, where oysters at one time existed, but where no public fishery is now carried on, might be utilized for cultivation. The department has lately adopted the system of leasing or licensing those blank spaces to private parties for purposes of oyster culture, and it is probable that numerous applications will be made for areas of this kind.



The proper protection of the beds in the close season, is attended with considerable difficulty. There is always a demand at the saloons for oysters during the summer months, and unprincipled parties make great efforts to supply them. They generally repair to the beds in the night time, and after securing sufficient to meet the demand, convey them to the parties in small cans. This practice has been found very difficult to prevent, and may be carried on in the immediate vicinity of the guardian's residence. The beds, however, were fairly well protected last season, and while a little of this smuggling may have been done, open poaching was not allowed.

#### SALMON.

Salmon do not frequent the rivers of this district during the fishing season the quantity appearing in the returns being taken by nets set on the coast. They, however, ascend the principal streams during the months of October and November to spawn, returning, it is presumed, to tidal waters before the winter sets in. They were noticed in large quantities in the Dunk, Morell, Winter and West Rivers, during the last fall, and the guardians had great trouble to protect them from the poachers, who are ever on the alert to capture them, if possible.

#### TROUT.

Trout shows a considerable decrease as compared with the year 1890. There is no export of trout, and no record is kept of the quantity taken; the figures given are therefore only approximate. Sea trout are to be found in all the streams of any importance in this province, and during the season local sportsmen, as well as others from abroad, resort to the rivers for purposes of recreation and sport. This year, trout were fairly abundant and anglers appeared satisfied.

#### HAKE.

The catch of hake exceeded that of 1890 by 2,048 cwt., thus compensating in some degree for the decrease in cod. Haddock, halibut and other ground fish show no great change, being about the same as last year.

#### SMEELTS.

This fishery shows a considerable falling off. This was mainly due to the difficulty experienced by shippers in getting the product to market. Owing to the unusual severity of the winter, the steamer "Stanley" was unable to make regular trips to the mainland, and the fishermen, fearing loss by detention on the way to market, abandoned the business early in the season.

The season which has just closed may be generally considered a successful one. The more valuable of our commercial fishes were in fair abundance and fishermen succeeded in making good catches. Prices also were up to the average and seem to have been well maintained throughout the season. These favourable conditions have greatly encouraged the fishermen, and they are now making extensive preparations for the coming season. The question then arises: Will our fisheries, prolific as they are, be able to stand the enormous drain that must necessarily follow the employment of so much outfit. Experience has shown that they cannot; owing to natural causes and the destruction made by man with his ingenious and fatal appliances, the breeding supply is kept down to the lowest point, being barely sufficient to keep some of the varieties of food fishes from total extermination. To maintain the balance, therefore, and keep up the supply, requires strict protection. The principal remedies are: wise regulations, rigidly enforced; continued statistical enquiry as to the conditions of the fisheries, and the extension of fish culture as a means of supplementing the natural supply. These methods have all been adopted by Canada, and only require to be strictly carried out to preserve our coastal waters and inland fisheries.

I have the honour to be, Sir,

Your obedient servant,

EDWARD HACKETT,

*Inspector of Fisheries, Prince Edward Island.*



PRINCE EDWARD ISLAND.

RETURN showing the Number, Tonnage and Value of Vessels and Boats engaged in the Fisheries, Quantity and Value of Fishing Material, Kinds and Quantities of Fish, and the Total Number of Men Employed, &c., in the Province of Prince Edward Island, for the year 1891.

District.	VESSELS AND BOATS EMPLOYED IN FISHING.							FISHING MATERIAL.				KINDS OF FISH.				
	Vessels.				Boats.			Nets.	Seines.		Trap.	Salmon, in cans, lbs.	Mackerel, barrels.	Mackerel, in cans.	Herring, barrels.	
	No.	Tonnage.	Value.	Men.	No.	Value.	Men.		No.	Value.						
<i>Prince County.</i>																
From North Cape to Black Pond . . . . .					110	3300	340	4000	2000	4	1200			1984		4000
From Black Pond to Seal Point . . . . .	5	136	1360	25	59	1770	211	2800	1400	13	3900			1800	6240	2000
From Seal Point to Brae River . . . . .	2	48	1000	9	45	1800	180	800	400					800		500
From Brae River to Higgins' Wharf . . . . .	1	24	480	3	6	300	12	300	150					20		300
Egmont Bay District . . . . .					63	1930	128	2423	1211					375		4147
Summerside and Richmond Bay . . . . .					10	300	20	600	300					5		150
From Sea Cow Head to West Line, Queen's County . . . . .	1	35	600	3	15	550	31	1800	900	2	800			70	2800	900
The Narrows District . . . . .					13	900	37	430	215	1	400			120	27400	1200
From Cascumpec to North Cape . . . . .	8	371	10300	80	164	5635	367	6650	3223	12	4580	1	700	624	1508	3839
Grand River District . . . . .					2	140	8	371	185					18		
Malpeque District . . . . .	1	30	600	4	20	1000	60	200	100					406		500
Rivers, viz., Dunk, Lot 10, and others . . . . .	1	18	300	4	3	60	6	80	40							30
Totals . . . . .	19	662	14640	128	510	17885	1400	20454	10124	32	10880	1	700	624	7096	17566

RETURN showing the Number, Tonnage and Value of Vessels and Boats engaged in the Fisheries, &c.—P. E. Island—*Con.*

DISTRICT.	KINDS OF FISH— <i>Con.</i>												FISH PRODUCTS.		VALUE.	
	Alwives, barrels.	Cod, cwt.	Cod Tongues and Sounds, barrels.	Hake, cwt.	Hake Sounds, lbs.	Haddock, cwt.	Halibut, lbs.	Shad, barrels.	Trout, lbs.	Smelt, lbs.	Eels, barrels.	Oysters, barrels.	LoBSTERS, cans.	Fish Oil, gallons.		Fish used as bait, barrels.
<i>Prince County.</i>																
From North Cape to Black Pond.	50	450	.....	600	1000	.....	.....	.....	3000	.....	25	.....	27464	700	200	2500
From Black Pond to Seal Point.	.....	150	.....	100	80	.....	.....	.....	1000	1200	15	.....	192528	100	700	4500
From Seal Point to Brae River.	.....	400	8	700	.....	10	.....	.....	400	500	2	.....	212000	300	400	1000
From Brae River to Higgins' Wharf.	20	.....	.....	.....	.....	.....	.....	.....	1100	8500	.....	270	42000	.....	100	.....
Egmont Bay District.	.....	.....	.....	.....	.....	.....	.....	.....	.....	2000	.....	.....	426924	.....	2320	.....
Summerside and Richmond Bay.	.....	.....	.....	.....	.....	.....	.....	.....	.....	40000	.....	25000	50736	.....	.....	.....
From Sea Cow Head to West Line, Queen's Co.	20	10	.....	10	.....	.....	.....	.....	4000	3000	3	.....	252422	10	850	5000
The Narrows District.	.....	250	.....	130	70	40	.....	.....	8000	8000	.....	2800	31720	.....	.....	.....
From Cascumpec to North Cape.	.....	600	.....	405	7275	.....	1200	3	1000	40000	56	20	212500	790	.....	3110
Grand River District.	.....	180	.....	.....	.....	.....	.....	.....	6000	6000	30	5400	.....	.....	.....	83,009 35
Malpeque District.	.....	200	.....	150	100	.....	.....	.....	200	10000	750	750	43448	500	300	400
Rivers, viz., Dunk, Lot 10, and others.	10	.....	.....	.....	.....	.....	.....	.....	4000	60000	200	950	.....	.....	.....	.....
Totals	100	2240	8	2095	8525	50	1200	3	14700	179800	331	35190	1738742	2400	4870	16510
																586,391 03

RETURN showing the Number, Tonnage and Value of Vessels and Boats engaged in the Fisheries, &c.—P. E. Island—*Con.*

DISTRICT.	VESSELS AND BOATS EMPLOYED IN FISHING.				FISHING MATERIAL.		KINDS OF FISH.												FISH PRODUCTS.			VALUE.							
	VESSELS.		BOATS.		NETS.		SEINES.		Mackerel, barrels.	Mackerel, in cans.	Herring, barrels.	Alewives, barrels.	Cod, cwt.	Cod Tongues and Sounds, barrels.	Hake, cwt.	Hake Sounds, lbs.	Haddock, cwt.	Trout, lbs.	Smelt, lbs.	Eels, barrels.	Oysters, barrels.		Lobsters, cans.	Fish Oil, galls.	Fish used as bait, barrels.	Fish used as manure, barrels.			
	No.	Tonnage.	Value.	Men.	Value.	No.	Value.	No.																			Value.		
Queen's Co.	Point Prin district.	6	135	4300	14	60	1200	94	1000	500	20	6000	15	500	400	150	1	100	70	10	500	100	1	275504	120	1500	42,576 06		
	Charlottetown district.	10	444	10000	50	55	3500	220	5000	2500	13	4000	2400	2500	50	2000	200	100	400	600	70	1900	51312	400	2000	13,123 68			
	Rustico district.	1	17	500	5	25	1200	75	2600	1300	3	900	600	150	100	400	600	70	400	600	70	45000	400	2000	800	65,464 00			
	New Glasgow district.	1	17	500	5	25	1200	75	2600	1300	3	900	600	150	100	400	600	70	400	600	70	45000	400	2000	800	3,575 00			
	Clifton and New London.	1	17	500	5	25	1200	75	2600	1300	3	900	600	150	100	400	600	70	400	600	70	45000	400	2000	800	3,575 00			
	From south-west line of Prince County to St. Peter's Island.	2	60	2000	10	75	1000	106	1500	750	1	300	90	1000	10	20	2500	60000	20	2000	489660	250	200	22,458 50					
	From south-east line of King's County to Rustico.	2	60	2000	10	75	1000	106	1500	750	1	300	90	1000	10	20	2500	60000	20	2000	489660	250	200	83,897 40					
	Bays, rivers, &c., viz., Pownal Bay, Vernon, Seal and Orwell Rivers.	3	45	500	12	30	600	60	305	152	12	20	12	20	3200	14300	23	1800	68016	10000	120	10000	120	800	36,702 24				
Totals.	22	701	17300	91	316	9140	745	19995	9997	37	11200	4267	4500	6080	60	3970	1	320	180	10	9300	90000	439	5840	968492	1570	2000	2500	274,719 88





RECAPITULATION showing the Number, Tonnage and Value of Vessels and Boats engaged in the Fisheries, Quantity and Value of Fishing Material, Kinds and Quantities of Fish, and the Total Number of Men Employed, &c., in the Province of Prince Edward Island, for the year, 1891.

COUNTIES.	VESSELS AND BOATS EMPLOYED IN FISHING.						FISHING MATERIAL.						KINDS OF FISH.						
	Vessels.			Boats.			Nets.			Seines.			Trap.		Salmon, fresh, in ice, lbs.	Salmon, in cans, lbs.	Mackerel, brls.	Mackerel, in cans.	Herring, brls.
	No.	Tonnage.	Value.	Men.	No.	Value.	Men.	Fathoms.	Value.	No.	Value.	No.	Value.	No.					
Prince.....	19	662	14,640	128	510	17,885	1,400	20,454	10,124	32	10,880	1	700	624	.....	.....	7,096	41,740	17,568
Queens.....	25	701	17,300	91	316	9,140	745	19,995	9,997	37	11,200	.....	.....	.....	.....	.....	4,267	4,500	6,080
Kings.....	22	849	31,200	164	537	15,422	1,498	47,550	24,300	8	2,500	.....	.....	.....	3,000	.....	6,124	.....	16,820
Total.....	66	2,212	63,140	383	1,363	42,447	3,643	87,999	44,421	77	24,580	1	700	624	3,000	624	17,487	46,240	40,468

COUNTIES.	KINDS OF FISH—Continued.										FISH PRODUCTS.				VALUE.			
	Alwives, brls.	Cod, cwt.	Cod Tongues and Sounds, brls.	Hake, cwt.	Dried Hake Sounds, brls.	Haddock, cwt.	Halibut, lbs.	Shad, brls.	Trout, lbs.	Smelt, lbs.	Eels, brls.	Oysters, brls.	Lobsters, cans.	Fish Oil, galls.	Fish used as bait, brls.	Fish used as manure, brls.	VALUE.	
																	\$	cts.
Prince..	100	2,240	8	2,095	8,525	50	1,200	3	14,700	179,800	331	35,190	1,738,742	2,400	4,870	16,510	586,391	03
Queens..	60	3,970	1	320	180	10	4,800	.....	9,300	90,000	439	5,840	968,492	1,570	2,000	2,500	274,719	88
Kings.....	570	8,310	2	6,100	6,370	782	4,800	.....	15,200	15,400	60	.....	963,180	9,368	4,600	3,000	377,622	90
Total.....	730	14,520	11	8,515	15,075	842	6,000	3	39,200	285,200	830	41,030	3,670,414	13,338	11,470	22,010	1,238,733	81

RECAPITULATION.

YIELD and Value of the different Fisheries in the Province of Prince Edward Island during the Year 1891.

Kinds of Fish.	Quantity.	Price.	Value.	Increase.	Decrease.
				Quantity.	Quantity.
		\$ cts.	\$ cts.		
Salmon, fresh.....	Lbs.	3,000	0 20	600 00	1,700
do canned.....	"	624	0 15	93 60	624
Mackerel.....	Brls.	17,487	14 00	244,818 00	650
do canned.....	Lbs.	46,240	0 12	5,548 80	100,306
Herring.....	Brls.	40,468	4 50	182,106 00	7,034
Alewives.....	"	730	4 50	3,285 00	219
Cod.....	Cwt.	14,520	4 50	65,340 00	1,912
Cod Tongues and Sounds.....	Brls.	11	10 00	110 00	4
Hake.....	Cwt.	8,515	3 00	25,545 00	2,043
Hake Sounds, dried.....	Lbs.	15,075	0 75	11,306 25	5,215
Haddock.....	Cwt.	842	3 50	2,947 00	72
Halibut.....	Lbs.	6,000	0 10	600 00	578
Shad.....	Brls.	3	10 00	30 00	2
Trout.....	Lbs.	39,200	0 10	3,920 00	23,800
Smelts.....	"	285,200	0 05	13,691 00	40,180
Eels.....	Brls.	830	10 00	8,300 00	2,182
Oysters.....	Brls.	41,030	3 00	123,090 00	5,827
Lobsters, in cans.....	Lbs.	3,670,414	0 14	513,857 96	1,253,620
Fish Oil.....	Galls.	13,388	0 40	5,335 20	2,027
Fish used as bait.....	Brls.	11,470	1 50	17,205 00	85
Fish Manure.....	"	22,010	0 50	11,005 00	13,560
Total Value of P.E. Island Fisheries in 1891.....			1,238,733 81		
do do do 1890.....			1,041,109 20		
Increase in 1891.....			197,624 61		

ESTIMATE

Of capital employed in the Fisheries of the Province of Prince Edward Island in the Year 1891.

	Value.	Total.
	\$ cts.	\$ cts.
66 vessels, 2,212 tons.....	63,140 00	
1,363 boats.....	42,447 00	
77 seines.....	24,580 00	
87,999 fathoms nets.....	44,421 00	
1 trap.....	700 00	
90,000 fathoms trawls.....	4,000 00	
50 smelt nets.....	1,000 00	
138,000 lobster traps.....	69,000 00	
142 lobster factories.....	100,000 00	
Fish stages and appliances.....	15,000 00	
600 oyster boats.....	9,000 00	
Oyster rakes and tongs.....	3,000 00	
		376,288 00



## APPENDIX D.

# QUEBEC.

### REPORT OF THE FISHERY OFFICER IN CHARGE OF THE GOVERNMENT VESSEL "LA CANADIENNE" ENGAGED IN THE PROTECTION OF THE GULF OF ST. LAWRENCE FISHERIES FOR THE YEAR 1891.

GASPÉ, P.Q., 31st December, 1891.

HON. CHARLES H. TUPPER,  
Minister of Marine and Fisheries,  
Ottawa.

SIR,—I have the honour to submit a report of the fisheries of the gulf division, for the year now closed, together with synopses of the reports of the local overseers, and statistical tables with the yield and value of fish caught.

These tables show a considerable increase in the yield of the fisheries over the previous year; in fact, the fishing season of 1891 has been the best we have had since 1883. Rough weather in June caused a good deal of damage to lobster fishermen, as well as to salmon net fishermen, while the epidemic of "La Grippe," which occurred in June and July along the coast of Labrador, and at Magdalen Islands, lasting for three weeks, during the very best of the fishing, occasioned serious loss to the people in these localities. The season was a remarkably open one; fishing operations for cod and herring having been carried on over the greater part of the south coast right up to the end of December.

#### SALMON.

The total product of the salmon fishery is valued at 638,077 lbs. as compared with 591,079 lbs. in 1890. The increase was greatest along the upper north shore. About Moisie, in the estuary of the river, the fishery was one of the best ever made. On the south shore, the catch though above that of 1890, was still below the average. The failure was due to the low state of the water in the rivers. Spring began early and dry; the rivers were unusually low when the fish first struck the coast in May; they made no attempt to run in, but kept off shore until the heavy rains, towards the end of June and beginning of July, had so raised the rivers that they could ascend without difficulty. Fly fishermen who were early on the south shore rivers did poorly, but those who happened to come just as the season was closing had better sport. On the north shore, from Natashquan down to the Straits, the fishery though better than last year was yet poor; owing to the continuance of drift ice along shore in June and July. The outer and more exposed nets did little or nothing.

#### COD.

Codfishing opened about the last week in May, and the returns which have been taken with extra care show that this fishery was a good one; the best since 1883—

Year.	Cod.		Year.	Cod.	
1882.....	198,523	cwt.	1887.....	164,100	cwt.
1883.....	215,097	do	1888.....	171,631	do
1884.....	168,165	do	1889.....	185,803	do
1885.....	164,529	do	1890.....	153,709	do
1886.....	161,050	do	1891.....	201,622	do

Though in some localities, owing to want of bait, the fishery may at times have been slack, yet, over the whole of the Gulf Division, and especially along the north shore, it was regular and steady. At l'Anse-au-Gascon, Bay des Chaleurs, the best boat (one man and a boy), took 150 cwts., dry, while at Natashquan, on the north shore, the same kind of boat took during the season, which lasted only from the 8th of June to the 11th July, 350 cwts., green. For the fourth year in succession, there has been good cod fishing in Bay des Chaleurs right up to the head of the bay. Owing to an open fall, the fishing continued very late, and on the 28th of December cod is still caught in Gaspé Bay and at other sheltered points on the coast, with an abundance of small fat herring for bait. The fish taken late in the fall, after the close of navigation, is left under salt all winter, and will be washed out, dried, and made as soon as the days are warm and the snow can be shovelled off the flakes in the early spring. The later cod is taken in the fall, the better it is.

A larger number of Nova Scotia fishermen than usual visited the coast of Labrador; they all did fairly well, though only those having trap nets got full fares, as this fishery on the coast has been improving for the past four years, and the chances are that, judging from past experience, this improvement will continue for some years. It is expected that a much larger Nova Scotia fleet will fish on the coast next season.

We also had a larger fleet from Newfoundland; this increase was made up by a number of small vessels from Fortune Bay and that neighbourhood. Before the enforcement of the Bait Act, these people had been engaged fishing for bait. Having now lost that occupation, and as cod fishing on the south coast of Newfoundland is poor, and they were afraid to venture on the French shore, they were compelled to come to Labrador. Most of them had never been there before; they were in doubt whether they would be allowed to fish in Canadian waters, fully expecting that in return for the action of their own Government towards Canadian fishermen, they would be driven off. A good deal of bad feeling was created owing to their being so allowed to fish, the Nova Scotia skippers claiming that they should be driven off.

The price of cod and cod oil was good, there being more competition for dry fish than usual, although the high prices paid for cod were not warranted by the state of the markets abroad. The bulk of the Gaspé fish is sold in Brazil, where, owing to the revolutionary troubles, the market was very uncertain and the rate of exchange ruinously low.

The fleet of schooners which hails from Esquimaux Point to fish for cod on the coast of Labrador did badly; but on their return home in August and September these people found good cod fishing right at their own doors at the Point. Fish were abundant during the whole fall, and the boats did well. The bulk of the fish taken here was pickled; it found a good market in Quebec and Montreal. If these people were fitted with larger boats, such as are used all over the coast, they would do much better to give up the Labrador fishing in vessels, where they only waste their time, and go in for the boat fishing which exists at their very doors.

#### HERRING.

The school of spring herring struck at Pleasant Bay, Magdalen Islands, about 1st of May. These fish did not remain long in shore, and by the 20th they had disappeared. Owing to the failure of the spring herring fishery in the Bay of Fundy and off Eastport, Maine, a larger number of United States vessels than usual came round after herring to the Magdalen Islands. Most of these vessels were traders buying fish, rather than fishermen. The fleet came in through the Gut of Canso, and as the ice had jammed across from Cape Breton to Prince Edward Island, they were unable to reach the islands in time for this fishery. As already stated, most of these vessels from Eastport and Lubec were traders buying herring. About 20,000 barrels were bought in this way. A few years ago, these fish taken from the seines could be had for 6 to 10 cents a barrel. This year, the average price was 45 cents,



and bankers buying herring for bait paid as high as \$1.65 per barrel. Spring herring were fairly abundant in Bay des Chaleurs, where it is estimated that about 80,000 barrels were caught for manure. These herring are large and in good condition, full of roe, and it is surely wrong that they should be used for manure. In Gaspé Bay, quite a number of the same fish was cured and barrelled, and on being shipped to market in the fall fetched as much as \$5 per barrel. Summer herrings were scarce. The Labrador fall herring fishery was a failure, but small fat herring were abundant on the Gaspé shores in December.

#### MACKEREL.

Mackerel were fairly abundant about Magdalen Islands, but scarce everywhere else. A few small schools were seen in Baie des Chaleurs, and up the St. Lawrence, between Cape Chatte, and Pointe des Monts. Complaint was made at Magdalen Islands of the practice of leaving mackerel gill nets in the water during day time. This practice is followed by fishermen from the United States and Nova Scotia, but not by our own people, who are all opposed to it. They claim that these immense strings of nets completely bar the passage of fish towards the shores, and prevent them from coming into waters where hand and line fishing is carried on. There can be no doubt but that gill nets whether for herring or mackerel should only be fished at night.

#### LOBSTERS.

The lobster fishery shows an increased yield over that of 1890 of 344,773 lbs. Of this amount 153,324 lbs. are due to the opening of new canneries on the Island of Anticosti. This fishery, however, showed a decided improvement all over this division. Lobsters were not only more abundant, but they were everywhere of a larger size. On the mainland, fishing began about the 1st of May; at Magdalen Islands it did not fairly start before the 20th, it being impossible to put out traps while the herring fishery was going on. Besides being late in getting to work, the canners at the Magdalen Islands were badly handicapped by the epidemic of *la grippe*, which struck the Islands about the 1st of June. The sickness came on so suddenly and was so general, that much of the meat ready to can was lost, and a good deal of that which was canned was of inferior quality, having stood too long, and being finally put up by unskilled hands. Some of the factories closed down and did not reopen. Though an extension to the 1st of August was granted, it did not by any means make up for the loss caused by this sickness, which occurred during the very height of the fishing. As mackerel struck about the middle of July, it was impossible to get fishermen to keep on fishing lobsters. On the Island of Anticosti the fishery opened about the 26th of May; a number of new canneries had been established, those at the east end and along the south shore of the island did well; this being entirely new ground, the run of lobsters is large.

#### SEALS.

The spring seal fishery by vessels from Magdalen Islands and Esquimaux Point was a failure. Seals were abundant in the Gulf, and the vessels from Newfoundland engaged fishing inside did well. The vessels from Nata-hquan, which stood down along the Labrador, struck the seals off Meccatina and loaded there. The sedentary seal fishery, with nets, along the coast of Labrador, in December and May, was hardly up to the average.

#### BAIT.

Herring used for bait was fairly abundant in May and June, but scarce during the summer and early fall. Late in the season, after the close of navigation, in November and December, small fat herring were plenty, and codfishing was carried on from sheltered localities right up to the last week of the year.



The large fishing firm of Robin, Collas & Co., put up at Newport, in the County of Gaspé, a freezer for the purpose of freezing a supply of spring herring, with which to supply their boats with bait, at times during the fishing season when other bait can not be had. It was found that this frozen herring, which can be kept any length of time at a small cost, answered the purpose admirably. There was a prejudice at first against it on the part of local fishermen, and it was not used as largely as it should have been. Some of the inshore boats employed no other bait during the season and did well. It was found that in the ordinary open fishing boats, this bait rolled in bags, and placed under the thwarts, will remain frozen for 24 hours, and this too in Baie des Chaleurs during the month of August. A number of Nova Scotia bankers hearing that frozen herring could be had at Newport, called for some. These fishermen stated that this bait will answer admirably and that it was worth, when ordinary fish bait was scarce or failed, from \$4 to \$5 a barrel, and that were they sure of always being able to procure it, they would not waste time looking for any other. It is the intention of some fishermen at Port Daniel to freeze a quantity of herring next spring with the view of supplying bait to bankers who often call there. With suitable freezers, large quantities of spring herring could be frozen in bulk at a small cost.

Squid struck in early in August, but was never very abundant. Capelin, now so scarce on the south shore, was abundant along the north shore and the coast of Labrador.

Before concluding this report I wish to call your attention to the necessity for having a faster and stonger vessel for the service now performed by "La Canadienne." This vessel is not strong enough in the hull to face ice, neither is she fast enough, averaging as she does only seven knots, for the service she is expected to perform.

## SYNOPSIS OF FISHERY OVERSEERS' REPORTS.

### BONAVENTURE COUNTY—RISTIGOUCHE DIVISION.

*Overseer J. A. Verge*, reports the catch of salmon on the north side of the estuary of the Ristigouche, at 33,989 lbs., against 33,465 lbs. last year. The length of nets was reduced in compliance with the new regulations, and only 19 stands were fished. The licenses on the Quebec side protest against having to pay fees on the total number of fathoms fished, both bar-net and wingers, while on the New Brunswick side most of the stations pay on the bar-net only. Fly-fishing on the Ristigouche was a failure during the first part of the season, owing to low water, but towards the close, after heavy rains, the fishing improved. It was, however, much below the average. Salmon are reported abundant on the spawning beds. Smelt-fishing was not prosecuted to any extent owing to inclement weather.

### CARLETON SUB-DIVISION.

*Overseer P. Cyr*, reports a slight improvement in the salmon net-fishing over that of last year, though the fishery is not by any means up to the average. Two lobster canneries were opened in this division one at Carleton, and another at Maria, where fishing had been abandoned years ago. The lobsters, though of a good size were scarce. Cod-fishing was good, though bait was scarce. Spring herring were not so abundant as usual.

### BONAVENTURE SUB-DIVISION.

*Overseer J. L. Smith*, reports salmon fishing a failure; several nets not even paying expenses. The total catch was only 10,310 lbs., as compared with 13,616 in 1890. The Cascapedia fishermen attribute this falling off to the heavy flow of water in the river some years ago which destroyed the spawn on the beds. The total number of salmon taken on the Big Cascapedia with the fly was 215 by 17

rods. Lobster fishing began about the first of May—four canneries were opened, and considering the number of traps fished, the catch was good. Spring herring gave about an average catch. Capelin were abundant at Paspebiac and New Carlisle, but scarce at all other stations. The summer catch of cod was fair; bait was, however, scarce, and fishermen had to use clams. The Bonaventure fishermen had to cross to Bathurst to get clams. The fall cod fishing was good so long as small herring could be had for bait.

PORT DANIEL SUB-DIVISION.

*Overseer John Phalen*, reports a considerable increase in the catch of salmon, cod and lobsters, as compared with the previous year. Salmon fishing began on the 26th May, and was attended with poor results during the first three weeks; but about the 15th June, the fishery improved, and by the end of the season the catch exceeded that of last year by 4,400 lbs. The heavy weather experienced during the end of June interfered a good deal with this fishery; it was often impossible to get at the nets, and no doubt many fish were lost, as dead fish were picked up all along shore. Codfishing began on the 20th May, which is early as compared with recent years. The fishing was excellent up to the 15th June, when it began to fail. In July and August, the catch was small owing to a scarcity of bait—but it improved again in September, October and November on small herring. One boat with a man and a boy, took during the season 150 cwts. of cod; this shows that fish must have been abundant. Spring herring struck in about the end of April, and were taken in large quantities for manure. Port Daniel Bay is now much frequented by cod bankers in search of bait, and some of the inhabitants are putting up ice houses to preserve these fish, so as to be able to supply fishermen with bait at any time. Now that the wharf is finished, vessels can always find a safe shelter in Port Daniel Bay. Summer herring were again scarce, and only a few mackerel were taken. Lobster fishing began on the 4th May. The catch was the best for years, exceeding that of last year by 19,000 lbs. During the first three weeks, lobsters were very abundant and the run as large as in the first years of the fishery. There was a good deal of competition between rival factories, and the prices paid to fishermen considerably advanced. The season has been an exceptionally open one; fishing operations began in April, and continued right up to the end of December. Though the weather was rough about the end of June, and many lobster traps wrecked, yet, the season has been a fine one, there having been no very heavy gales of wind.

GASPÉ COUNTY—GRAND RIVER SUB-DIVISION.

*Overseer Henry Jones* reports salmon net fishing a failure. The fish were late in running, and during the end of June the weather kept rough, and nets could not be properly attended. Lobster fishing was good and began early with a fair run of fish. Five canneries put up 101,232 lbs. as compared with 67,800 lbs. by six canneries in the previous year. The codfishery, also began early, and though bait was often scarce, and for weeks at a time, there was little or no fishing on that account, yet the total catch for the season shows 50,730 cwt. as against 36,000 cwt. in 1890.

GASPÉ SUB-DIVISION.

*Overseer George Annett* reports a good season's fishing. Salmon fishing began early, but owing to low water in the rivers, the fish did not run in until towards the end of the season. There were taken 53,785 lbs. as compared with 46,456 lbs. in 1890. Lobster fishing began during the first week of May, and continued steadily good throughout the season. Five canneries put up 102,148 lbs. as compared with 47,376 lbs. by the same number in 1890. Lobster fishermen say that the run of lobsters was almost as good as during the first years of the fishery. Spring herring were abundant in Gaspé Bay during the month of May; a considerable quantity was put up (salted) for export, and sold in Quebec and Montreal for \$4.50 and \$5 a



barrel. Smelt fishing began late; the catch was, however, about the same as last year. This fishery closed with the last trip of the steamer "Admiral," on the 20th November. As prices of all kinds of fish ruled high, the season just closed has been a very prosperous one for the fishermen. At the date of writing this report, 28th December, cod and herring are still being taken.

#### MAGDALEN RIVER SUB-DIVISION.

*Overseer Joseph Lemieux* reports that salmon fishing began late, and was never good, in fact several of the stations had to be abandoned. Most of the coast line comprised in this sub-division is not suited for salmon net fishing. Cod fishing in the eastern part of this division was good, and continued so till late in the fall. Over the whole of this division, the increase as compared with the previous year amounts to 3,295 cwt.

#### STE. ANNE DES MONTS SUB DIVISION.

*Overseer J. I. Letourneau* reports a better cod fishery than he has seen for a number of years. People, however, are gradually giving up fishing, and the catch was not anything like so large as it might have been, had they been better fitted for it. The white porpoises were not as troublesome as usual. Salmon net fishing is not carried on to any extent on this part of the coast; there being only one net at Martin River and another at Cape Chatte. Fly fishing in the Ste. Anne's River was a failure. This was caused by the early dry spring having lowered the water before the fish struck, and they did not enter the river until after the fishing season had closed. The river guardians report plenty of fish running up in August and September. Herring were abundant in the spring, disappearing altogether during the summer, to again become plenty in the fall.

#### MAGDALEN ISLANDS SUB-DIVISION.

*Overseer A. Chevrier* reports a good cod fishing; the yield being 14,685 cwts, as against 9,025 last year. Very few vessels fitted out for cod fishing. This fishery is now carried on almost exclusively by boats from Etang du Nord and West Point. The catch of mackerel made entirely by shore boats with the jig is not quite up to that of last year, being 535 brls. short. The Magdalen Island mackerel fishermen complain strongly against the practice followed by United States and Nova Scotia fishermen of leaving gill nets in the water during day time. This practice is one which certainly interferes to a great extent with hand and line fishing as it has the effect of keeping mackerel off shore. The lobster fishery was late in beginning as it was impossible to put out lobster traps or even, in some cases, to get men to put them out, while the spring herring fishery lasted. It was, therefore, not until the 20th of May that the bulk of the traps were out. The fishing began most abundantly, and promised an enormous yield, but about the 26th of May, almost the entire population of the Islands was taken down with "la grippe." This lasted for three weeks during which all fishing operations were at a stand still. An extension of the lobster fishing season was granted up to the end of July. Some of the canneries, however, did not re-open, and as before the end of July the mackerel had struck, it was impossible to keep the fishermen at the lobster fishery. This extension did not by any means compensate for the loss caused by the sickness in May and June. In spite of all these disadvantages, there was put up 391,104 lbs., as compared with 341,088 in 1890. Spring herring struck in about the end of April and the beginning of May. These fish were not as abundant as usual, and did not remain long in Pleasant Bay. Owing to the failure of the Bay of Fundy and Eastport herring fishery, an unusually large fleet of United States fishing and trading vessels repaired to the islands in May for herring, but owing to the ice blocking the passage between Cape Breton and Prince Edward Island, most of them were late in reaching the islands and missed the herring. The spring seal fishery was again a failure; the catch being a long way below the average.



## SAGUENAY COUNTY—POINTE DES MONTS SUB-DIVISION.

*Overseer Napoleon Comeau* reports good fishing in his sub-division. The salmon net fishery, though not quite up to that of last year, was still above an average. The cod fishery was fully double that of last year, while the prices obtained were higher. The herring were abundant in the fall, and the failure of this fishery on the coast of Labrador having caused a great demand for these fish, large prices were obtained. The winter seal hunt was good, 602 seals being captured as against 314 in 1890.

## MOISIE SUB-DIVISION.

*Overseer Théotime Migneault* reports that the first salmon caught in the nets at Moisie, was on the 19th of May. The total catch amounted to 13 brls., salted and 225,539 lbs. fresh, in ice. This is by long odds the best fishing made. The main run of fish was between the 2nd of June and the 8th of July. The summer and fall codfishing was good, the yield being 5,592 cwts. The herring fishery was not so abundant as in 1890, but this was due to fewer people being engaged in it. Bait was plenty throughout the season.

## MINGAN SUB-DIVISION.

Owing to the illness of *Overseer Duguay*, the statistics for this division were taken by *Overseer Gaudin* from Natashquan. Mr. Gaudin reports a falling off in the catch of salmon. This was largely due to the fact that the St. John's river fishermen were a fortnight late in getting out their nets; in fact, the biggest run of salmon was over before the nets were out. The codfishing was good; the returns showing 20,990 cwt., as compared with 17,600 cwt. in 1890. The fall herring fishery, usually made by the fleet of schooners from Esquimaux Point, was again a failure; the whole fleet having to return with only 260 brls. The spring seal fishery on the ice in March and April was also a failure. The people of Esquimaux Point were saved from distress by the abundant cod fishing made from August to October right at the Point. Were these people better fitted with boats and fishing gear they would do much better outside the Mingan Islands than by going down to the Labrador in their schooners.

## NATASHQUAN SUB-DIVISION.

*Overseer George Gaudin* reports the spring seal fishery good; four small schooners having taken 1173 seals. Salmon fishing in the different rivers of this division was not so good as usual, owing to a freshet which caused the rivers to rise so much that nets had to be furled during the best time of fishing, about the middle of June. The outside or coast nets did fairly—the first salmon was caught on the 1st June. Anglers had fine sport; 316 fish being taken with the fly on the Natashquan. Cod and capelin struck on the 8th June, and continued abundant until the 11th July when they suddenly disappeared. During that time most of the fishermen did well, one boat's crew having taken 360 cwt. green. Unfortunately many fishermen were prevented from benefitting by this run of fish through being laid up with *la grippe*. It is safe to say that had it not been for this sickness, the catch would have been double what it was. Only one death took place from *la grippe*; this was Captain Paul Vigneault, one of the oldest and most respected inhabitants of the North Shore. A few barrels of herring were caught in the spring; but during the summer and fall, none were taken.

## WASHEECOTAI SUB-DIVISION.

*Overseer G. Mathurin* reports that salmon fishing began about the 20th June and closed on the 15th July. Field ice remained on the shore almost all June, and interfered greatly with the fishery. Cod struck about the 10th June coming from the westward. Fishermen state that for the past twenty-five years they have not known cod to have been so abundant. Two Nova Scotia vessels entered Romaine

on the 18th June, and off that harbour loaded in twelve days. The cod did not remain on this part of the coast more than a fortnight but passed on down to the east. Lobster fishing in this subdivision has been abandoned, two canneries having been pulled down and removed to Anticosti.

ST. AUGUSTIN SUBDIVISION.

*Overseer John Legouvé* reports an improvement in all the fisheries of his division. Salmon fishing was partly hindered by the field ice which kept along shore during the month of June, and prevented the setting of the outside nets. Cod struck towards the end of June and passed gradually along the coast to the eastward together with capelin; the fishing being over by the end of July. A considerable fleet of vessels from Nova Scotia and Newfoundland fished for cod on this part of the coast. They all did well, most of them loading in a couple of weeks. The sedentary seal fishing was much better than that of the year before though not quite up to the average of former years. The *grippe* passed along this part of the coast during the month of July. The whole of the inhabitants were down at once, and this occurred during the best of the codfishing.

BONNE ESPÉRANCE SUBDIVISION.

*Overseer W. H. Whitely* reports that the fishing season of 1891 was on the whole better than that of last year. The spring seal fishing was fair, and would have been better if the ice had not hindered operations. Salmon fishing was also injured by the ice coming back in June and July; still the yield was better than that of last year. The cod fishing was equal to that of last season, and had it not been for the ice in July, it would have been the best cod fishing seen for very many years past. Herring was abundant off shore, but none come near enough for the seines. Capelin and launce were abundant during the codfishing season. The *grippe* caused much loss to fishermen, but there were no deaths in this subdivision west of Bras d'Or. At Long Point five people died of it.

The main part of the catch of codfish was taken with traps and seines: fish would not take the hook.

I have the honour to be, Sir,

Your obedient servant,

WM. WAKEHAM,

*Fishery Officer in charge of the Gulf and Lower St. Lawrence Division.*

RETURN showing the Number and Value of Vessels, Boats and Fishing Materials,  
County of Bonaventure, Province

## RISTIGOUCHE SUBDIVISION

NAME OF DISTRICT.	VESSELS AND BOATS EMPLOYED IN FISHING.						FISHING MATERIAL.			
	Vessels.				Boats.		Nets.		Seines.	
	No.	Tonnage.	Value.	Men.	No.	Value.	Fathoms.	Value.	Fathoms.	Value.
Head of Tide to Maguasha.....			\$		20	\$ 300		\$ 5492		\$

## CARLETON SUBDIVISION

Maguasha and Nouvelle.....					60	1200	170	3400	1020	300	150
Carleton .....					86	1720	257	4640	1452	400	200
Maria.....					95	1900	283	5400	1800	800	400
Totals.....					241	4820	710	13440	4272	1500	750

## BONAVENTURE SUBDIVISION

New Richmond.....					32	320	35	960	480		
Black Capes.....					27	260	30	1800	1180		
Caplin.....					180	2000	160	5900	2655	150	90
Bonaventure.....					220	2950	200	7500	3500	1150	715
New Carlisle.....	1	10	100	3	50	525	50	750	625	550	448
Paspebiac.....					90	1600	150	1200	900	250	175
Totals.....	1	10	100	3	599	7655	625	18110	9340	2100	1428

## PORT DANIEL SUBDIVISION

Paspebiac Portage.....					35	1900	80	1100	550	120	150
Nouvelle.....					40	2400	100	1400	600	400	400
Shigawack.....					37	1000	70	1200	500	40	50
Point Loup-Marin.....					70	840	120	1400	560	60	75
Port Daniel Bay.....	1	26	500	3	45	2200	90	1400	600	100	150
L'Anse à la Barbe.....					25	1500	65	1200	500	40	50
L'Anse à Gascon.....					60	3600	160	3000	1200	240	300
Totals.....	1	26	500	3	312	13440	685	10700	4510	1000	1175

## TOTAL FOR COUNTY

Ristigouche Subdivision.....					20	300	20	5492	5492		
Carleton do.....					241	4820	710	13440	4272	1500	750
Bonaventure do.....	1	10	100	3	599	7655	625	18110	9340	2100	1428
Port Daniel do.....	1	26	500	3	312	13440	685	10700	4510	1000	1175
Totals.....	2	36	600	6	1172	26215	2040	47742	23614	4600	3353



the Number of Men employed, with the Kinds and Quantities of Fish, &c., in the of Quebec, for the Year 1891.

(Head of Tide to Maguasha).

KINDS OF FISH.										FISH PRODUCTS.					Fish used for Local Consumption, barrels.	VALUE.
Smelts, lbs.	Salmon, fresh, lbs.	Cod, cwt.	Haddock, cwt.	Herring, barrels.	Herring, smoked, boxes.	Mackerel, barrels.	Eels, barrels.	Cod Tongues and Sounds, barrels.	Lobsters, in cans, lbs.	Seal Skins, No.	Seal Oil, galls.	Cod Oil, galls.	Fish used as Bait, barrels.	Fish used as Manure, barrels.		
4800	33989	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8 cts. 7,037 80

(Maguasha to Big Cascapedia River).

.....	12500	50	.....	100	50	.....	15	.....	.....	.....	.....	30	30	9356	2000	16,072 50
.....	8000	122	.....	240	250	8	12	.....	8200	.....	.....	80	60	18040	1500	19,813 50
.....	10000	1099	.....	229	200	15	10	.....	9800	.....	.....	732	400	29256	728	28,140 80
.....	30500	1271	.....	569	500	23	37	.....	18000	.....	.....	842	490	56652	4228	64,026 80

(Big Cascapedia to Paspebiac Point).

.....	5000	75	.....	.....	150	.....	.....	.....	.....	.....	.....	50	20	450	230	2,570 00
.....	4230	100	.....	.....	.....	.....	.....	.....	.....	.....	.....	75	22	550	278	2,746 00
.....	700	1000	.....	.....	120	.....	.....	.....	29616	.....	.....	750	400	5000	1000	16,216 24
.....	300	2800	50	.....	200	10	.....	.....	14400	.....	.....	2000	950	7200	1950	28,666 00
.....	80	600	.....	.....	50	.....	.....	.....	14400	.....	.....	400	160	4000	400	8,744 50
.....	.....	2200	75	.....	100	.....	.....	.....	.....	.....	.....	1360	750	5500	1000	18,606 50
.....	10310	6775	125	.....	620	10	.....	.....	58416	.....	.....	4635	2302	22700	4858	77,549 24

(Paspebiac Point to Point Maquereau).

.....	.....	1600	10	20	.....	.....	.....	5	.....	.....	.....	1500	300	1200	200	9,825 00
.....	.....	1000	20	20	.....	.....	.....	.....	35000	.....	.....	900	250	400	250	11,495 00
.....	.....	600	.....	10	.....	.....	.....	.....	.....	.....	.....	500	150	400	250	4,370 00
.....	.....	500	.....	10	.....	.....	.....	.....	7000	.....	.....	400	120	500	100	4,265 00
.....	23000	1600	.....	15	.....	.....	.....	.....	26271	3	6	1400	300	500	200	17,611 59
.....	1200	800	.....	10	.....	.....	.....	.....	4000	.....	.....	700	300	500	80	5,745 00
.....	530	3000	.....	30	.....	.....	.....	5	.....	.....	.....	2500	600	800	300	17,291 00
.....	24730	9100	30	115	.....	.....	.....	10	72271	3	6	7900	2020	4300	1380	70,602 59

OF BONAVENTURE.

4800	33989	.....	.....	569	500	23	37	.....	18000	.....	.....	842	490	56652	4228	7,037 80
.....	30500	1271	.....	.....	620	10	.....	.....	58416	.....	.....	4635	2302	22700	4858	64,026 80
.....	10310	6775	125	.....	.....	.....	.....	.....	58416	.....	.....	4635	2302	22700	4858	77,549 24
.....	24730	9100	30	115	.....	.....	.....	10	72271	3	6	7900	2020	4300	1380	70,602 59
4800	99529	17146	155	684	1120	33	37	10	148687	3	6	13377	4812	88652	10466	219,216 43

RETURN showing the Number and Value of Vessels, Boats and Fishing Materials,  
County of Gaspé, Province

GRAND RIVER SUBDIVISION

NAME OF DISTRICT.	VESSELS AND BOATS EMPLOYED IN FISHING.						FISHING MATERIAL.				
	Vessels.				Boats.		Nets.		Seines.		
	No.	Tonnage.	Value.	Men.	No.	Value.	Fathoms.	Value.	Fathoms.	Value.	
		\$			\$		\$		\$		
Newport .....					64	2,820	140	2,390	960	120	120
Newport Point .....					45	3,150	135	2,700	1,200	60	80
Anse aux Canards .....					20	1,150	55	1,000	430	60	70
Pabos .....					29	1,160	72	700	300	40	40
Little Pabos .....					30	1,750	70	1,500	550	30	40
Grand River .....					165	6,475	387	7,060	2,478	250	215
Cape Cove .....					80	3,570	222	3,500	1,650	330	250
L'Anse à Beaufils .....					28	1,400	56	1,120	560		
Percé .....	1	66	1,600	10	123	6,200	346	7,020	3,630	170	170
Bonaventure Island .....					52	2,500	104	2,800	1,560	40	60
Totals .....	1	66	1,600	10	636	30,175	1,587	29,790	13,318	1,100	1,045

GASPÉ SUBDIVISION (Corner

Corner of the Beach .....					25	560	17	645	412	175	140
Barachois .....					120	2,100	120	1,200	600	125	200
Belle Anse .....					32	700	24	480	193	25	25
Malbaie .....					67	3,972	108	2,900	1,130	56	90
Point St. Peter .....					87	2,335	160	2,390	630	180	260
Chien Blanc .....					56	900	56	1,100	450	90	60
Bois Brûlé .....					22	440	21	660	297	25	30
Anse à Brillant .....					10	240	10	200	40	.....	.....
Seal Cove .....					30	570	30	765	360	.....	.....
Douglastown .....					190	4,680	200	6,942	5,180	240	160
Haldimand .....					13	224	12	369	200	.....	.....
Sandy Beach .....					24	375	39	1,986	2,000	.....	.....
Gaspé and South-west .....					32	320	32	2,723	1,410	500	500
L'Anse aux Cousins .....					13	114	13	1,019	910	150	150
Peninsula .....					36	484	47	2,442	2,298	.....	.....
Cape aux Os .....					32	484	34	868	575	.....	.....
Seal Rock .....					10	124	12	222	101	.....	.....
Little Gaspé .....					11	176	11	546	391	.....	.....
Grande Grève .....					34	572	50	1,119	820	104	100
St. George's Cove .....					9	178	9	310	255	.....	.....
Indian Cove .....					15	138	9	310	255	32	34
Strip Head .....					36	560	25	736	519	.....	.....
Totals .....					904	20,246	1,039	29,932	19,026	1,702	1,749

the Number of Men employed, with the Kinds and Quantities of Fish, &c., in the of Quebec, for the Year 1891.

(Point Maquereau to corner of the Beach).

KINDS OF FISH.										FISH PRODUCTS.			Fish used for Local Consumption, barrels.	* VALUE.	
Smelts, lbs.	Salmon, fresh, lbs.	Cod, cwt.	Haddock, cwt.	Halibut, lbs.	Herring, barrels.	Mackerel, barrels.	Trout, barrels.	Eels, barrels.	Cod Tongues and Sounds, barrels.	Lobsters, in cans, lbs.	Cod Oil, galls.	Fish used as Bait, barrels.			Fish used as Manure, barrels.
.....	500	3,200	26	300	140	..	..	.....	5	1,500	2,800	350	1,110	270	18,741 00
.....	150	4,200	40	900	80	..	..	.....	.....	1,000	4,000	600	400	200	23,210 00
.....	800	2,000	14	350	80	.....	.....	.....	20	.....	1,300	300	350	70	11,229 00
.....	3,200	3,000	21	128	116	.....	.....	.....	100	500	2,100	195	100	200	17,800 80
.....	1,300	2,500	20	400	40	.....	.....	.....	.....	.....	2,000	200	500	100	13,550 00
.....	1,050	10,430	50	500	1,040	.....	.....	.....	2	.....	7,500	1,730	1,250	570	60,570 00
.....	.....	8,000	45	540	475	.....	.....	.....	.....	75,000	5,300	780	150	190	52,974 00
.....	.....	2,400	.....	.....	50	.....	.....	.....	.....	.....	1,900	175	.....	100	12,447 50
.....	.....	11,500	150	.....	395	.....	.....	.....	.....	23,232	7,666	1,600	.....	412	64,419 38
.....	.....	3,500	35	.....	80	.....	.....	.....	.....	.....	2,500	200	.....	75	17,832 50
.....	7,000	50,730	401	3,118	2,496	..	..	..	127	101,232	37,066	6,130	3,860	2,187	292,774 18

of the Beach to Cape Gaspé Head).

.....	4,620	700	.....	.....	24	.....	.....	.....	.....	21,648	350	140	.....	31	7,686 72
10,631	7,500	4,800	.....	.....	80	.....	.....	.....	.....	.....	2,400	900	.....	230	27,221 55
.....	1,350	720	.....	.....	50	.....	.....	.....	.....	36,720	360	150	.....	25	9,344 80
.....	591	3,520	.....	.....	58	.....	.....	.....	.....	.....	2,250	440	.....	98	18,171 20
.....	590	3,250	.....	.....	24	.....	.....	.....	.....	.....	1,600	400	.....	100	16,491 00
.....	.....	1,170	.....	.....	14	.....	.....	.....	.....	.....	610	250	.....	75	6,247 00
.....	.....	660	.....	.....	33	.....	.....	.....	.....	13,200	330	180	.....	33	5,500 50
.....	.....	200	.....	.....	5	.....	.....	.....	.....	.....	100	80	.....	20	1,162 50
.....	576	600	.....	.....	6	.....	.....	.....	.....	19,200	300	120	.....	45	6,010 20
.....	3,820	3,820	.....	.....	778	.....	.....	.....	.....	.....	1,910	2,000	.....	400	26,819 00
.....	1,050	160	.....	.....	20	.....	.....	.....	.....	.....	80	50	.....	20	1,207 00
.....	5,628	200	.....	.....	150	2	1	.....	.....	.....	100	100	.....	30	3,048 60
63,597	10,425	.....	.....	.....	30	.....	12	.....	.....	.....	.....	.....	.....	55	5,739 85
.....	6,031	.....	.....	.....	20	.....	.....	.....	.....	.....	.....	.....	.....	10	1,336 20
.....	8,413	26	.....	.....	53	2	.....	.....	.....	.....	15	10	.....	46	2,263 10
.....	550	487	.....	.....	46	.....	.....	.....	.....	11,380	164	120	.....	73	4,639 30
.....	.....	165	.....	.....	18	.....	.....	.....	.....	.....	80	65	.....	15	1,013 00
.....	.....	146	.....	.....	27	.....	.....	.....	.....	.....	110	70	.....	10	967 50
.....	1,531	1,092	.....	.....	46	.....	.....	.....	.....	.....	662	153	.....	64	6,177 50
.....	.....	265	.....	.....	30	.....	.....	.....	.....	.....	115	60	.....	22	1,551 50
.....	1,110	475	.....	.....	44	.....	.....	.....	.....	.....	323	80	.....	24	2,902 70
.....	.....	600	.....	.....	20	.....	.....	.....	.....	.....	300	320	.....	50	3,590 00
74,228	53,785	23,056	.....	.....	1,576	2	3	12	.....	102,148	12,159	5,688	.....	1,476	159,090 72



RETURN showing the Number and Value of Vessels, Boats and

MAGDALEN RIVER SUBDIVISION

NAME OF DISTRICT.	VESSELS AND BOATS EMPLOYED IN FISHING.						FISHING MATERIAL.						
	Vessels.				Boats.		Nets.		Seines.				
	Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Fathoms.	Value.	Fathoms.	Value.	Salmon, brls.	Salmon, fresh, lbs
			¢			¢			¢		¢		
Cape Rosier.....	}												
Jersey Cove.....													
Anse à Louise.....					280	3650	290	6500	2500	180	100		
Trois Ruisseaux.....													
Anse à Grisfonds.....					165	2850	160	3800	1500	140	140		
Fox River.....	}												
Anse à Fugère.....													
Petite Rivière.....													
Petit Cap.....													
Grande Anse.....	}				244	5057	244	5060	3100	180	230		
Echourie.....													
Pointe Jaune.....													
Anse à Valeau.....													
Pointe Sèche.....	}												
Grand Etang.....													
Chlorydorme.....					152	3025	151	3500	2135	274	84	5	
Petite Anse.....	}												
Frigate Point.....													
Petite Vallée.....					36	600	37	1000	400			1	
Grande Vallée.....													
Manche d'Epée.....													
Gros Mâle.....	}												
Anse Pleureuse.....					100	1400	120	2000	1200	80	65		4074
Monts Louis.....													
Rivière à Pierre.....													
Magdalen River.....					20	1400	120	650	125	105	60		1000
Totals.....					997	17982	1122	22510	10960	959	679	6	5074

Fishing Materials, &c., in the County of Gaspé, &c.—Continued.

(Cape Rosier to Rivière à Pierre).

KINDS OF FISH.											FISH PRODUCTS.				VALUE.		
Cod, cwt.	Haddock, cwt.	Halibut, lbs.	Herring, barrels.	Mackerel, barrels.	Trout, barrels.	Cod Tongues and Sounds, barrels.	Lobster, in cans, lbs.	Coarse and Mixed Fish, barrels.	Seal Skins, No.	Porpoise Skins, No.	Seal Oil, galls.	Porpoise Oil, galls.	Cod Oil, galls.	Fish used as Bait, barrels.			Fish used as Manure, barrels.
5000	....	3000	150	....	....	....	....	....	....	....	....	....	3500	1800	600	350	29,275 00
3500	....	2000	75	....	....	....	....	....	....	....	....	....	2700	1200	300	150	19,917 50
7500	....	2500	500	....	....	8	....	....	....	....	....	....	4500	2000	500	455	43,200 00
3300	....	7600	45	....	....	5	....	....	....	....	....	....	1800	1200	200	400	20,162 50
900	....	2000	20	....	4	2	....	....	....	....	....	....	500	200	75	100	5,353 50
1800	....	400	30	....	....	....	....	....	....	....	....	....	1200	400	200	250	11,269 80
300	....	500	12	....	....	....	....	....	....	....	....	....	200	200	40	50	2,254 00
22300	....	18000	832	....	4	15	....	....	....	....	....	....	14400	7000	1915	1755	131,432 30

RETURN showing the Number and Value of Vessels, Boats and

STE. ANNE DES MONTS SUBDIVISION

NAME OF DISTRICT.	VESSELS AND BOATS EMPLOYED IN FISHING.						FISHING MATERIAL.									
	Vessels.			Boats.			Nets.		Seines.		Trap- nets.					
	No.	Tonnage.	Value.	Men.	No.	Value.	Men.	Fathoms.	Value.	Fathoms.	Value.	No.	Value.	Smelts, lbs.	Salmon, barrels.	Salmon, fresh, lbs.
			¢			¢			¢		¢		¢			
Claude .....					20	800	40	450	320	106	90				5	
Marsouis.....					8	300	16	225	150	140	96					
Martin River.....					9	250	18	340	290						1	
Ste. Anne.....					71	2800	128	1250	914							1770
Cape Chatte.....					25	900	50	971	612						2	
Totals.....					133	5050	252	3236	2286	246	186				8	1770

MAGDALEN ISLANDS

Entry Island.....					6	180	12	500	432						
Amherst Island.....	3	102	2500	25	145	3950	367	15480	10080	1550	1960				
Grindstone Island.....	9	383	9300	108	116	9650	327	4000	3200	450	900				
Allright Island.....	6	300	9000	46	66	1650	185	800	1040						
Wolf Island.....					35	875	90	100	75						
Grand Entry Island.....					23	490	49	300	225		1	300			
Grosse Isle.....					30	825	74	200	125						
Bryon Island.....					20	500	54								
Totals.....	18	785	20800	179	441	18120	1158	21380	15177	2000	2860	1	300		

TOTAL FOR THE

Subdivisions.															
Grand River.....	1	66	1600	10	636	30175	1587	29790	13318	1100	1045				7000
Gaspé Bay.....					904	20246	1039	29932	19026	1702	1749			74228	53785
Magdalen River.....					997	17982	1122	22510	10960	959	679			6	5074
Ste. Anne's.....					133	5050	252	3236	2286	246	186			8	1770
Magdalen Islands.....	18	785	20800	179	441	18120	1158	21380	15177	2000	2860	1	300		
Totals.....	19	851	22400	189	3111	91573	5158	106848	60767	6007	6519	1	300	74228	67629



Fishing Materials, &c., in the County of Gaspé, &c.—*Concluded.*

(Claude River to Cape Chatte).

KINDS OF FISH.									FISH PRODUCTS.					Fish used for Local Consumption, barrels.	VALUE.	
Cod, cwt.	Haddock, cwt.	Halibut, lbs.	Herring, barrels.	Mackerel, barrels.	Trout, barrels.	Fels, barrels.	Cod Tongues and Sounds, barrels.	Lobsters, in cans, lbs.	Seal Skins, No.	Seal Oil, gallons.	Porpoise Oil, gallons.	Cod Oil, gallons.	Fish used as Bait, barrels.			Fish use as Manure, bar- rels.
850	.....	.....	59	.....	.....	.....	.....	.....	.....	.....	.....	425	40	250	150	\$ cts.
750	.....	.....	25	.....	.....	.....	.....	.....	.....	.....	.....	375	40	150	56	5,125 50
715	.....	600	33	.....	.....	.....	1	.....	.....	.....	.....	357	40	130	33	3,996 50
2948	.....	1000	290	10	.....	.....	2	.....	15	45	60	1474	160	91	347	3,851 80
996	.....	1560	202	8	.....	.....	.....	.....	.....	45	45	498	60	180	240	17,468 85
6259	....	3160	609	....	18	..	3	.....	15	45	105	3129	340	801	826	7,016 20
																37,458 85

SUBDIVISION.

45	12	.....	60	72	.....	.....	.....	150	750	.....	30	25	.....	30	2,179 50
8750	600	4000	600	396	.....	13	65368	5430	23500	.....	5833	621	500	658	81,734 72
5060	565	1526	500	1055	.....	.....	127636	3450	16550	.....	3740	1600	1400	850	78,717 64
130	35	2000	.....	1700	.....	.....	27188	.....	.....	.....	78	700	310	700	32,550 02
150	50	.....	.....	450	.....	.....	3888	40	200	.....	100	360	.....	50	8,604 32
50	5	.....	.....	30	.....	.....	128624	80	400	.....	33	30	.....	150	19,588 06
250	60	.....	.....	480	.....	.....	16800	160	800	.....	166	240	.....	100	11,613 40
250	40	.....	.....	310	.....	.....	21600	160	800	.....	166	200	.....	75	9,815 40
14685	1367	7526	1160	4483	.....	13	391104	9470	43000	.....	10146	3776	2210	2613	244,803 06

COUNTY OF GASPÉ.

50730	401	3118	2496	.....	.....	127	101232	.....	.....	.....	37066	6130	3860	2187	292,774 18
23056	.....	.....	1576	2	3	12	102148	.....	.....	.....	12159	5688	.....	1476	159,090 72
22300	.....	18000	832	.....	4	.....	15	.....	.....	.....	14400	7000	1915	1755	131,432 30
6259	.....	3160	609	18	.....	3	.....	15	45	105	3129	340	801	826	37,458 85
14685	1367	7526	1160	4483	.....	13	391104	9470	43000	.....	10146	3776	2210	2613	244,803 06
117030	1768	31804	6673	4485	25	12	594484	9485	43045	105	76900	22934	8786	8857	865,559 11

RETURN showing the Number and Value of Vessels, Boats and Fishing Materials,  
County of Saguenay, Province

POINTE DES MONTS SUBDIVISION

NAME OF DISTRICT.	VESSELS AND BOATS EMPLOYED IN FISHING.						FISHING MATERIAL.						
	Vessels.				Boats.		Nets.		Seines.		Trap-nets.		
	No.	Tonnage.	Value.	Men.	No.	Value.	Men.	Fathoms.	Value.	Fathoms.	Value.	No.	Value.
		\$				\$			\$		\$		\$
Manicouagan.....	1	12	300	2				150	75				
Godbout.....	1	24	600	2	17	340	17	880	880	300	300	1	300
Pointe des Monts.....					3	300	5	250	250	100	100		
Trinity.....					9	380	16	690	690				
Caribou Island.....	3	39	1500	7	27	540	26	1000	950	60	40		
Egg Island.....					2	40	2	150	100	40	45		
English Point.....					36	720	43	1110	1075	45	50		
Pentecost.....					3	150	5	150	150				
Cailles Rouges.....					3	60	9	150	150	45	70		
Totals .....	5	75	2400	11	100	2530	123	4530	4320	590	605	1	300

MOISIE SUBDIVISION

Jambons.....	1	9	200	2	11	360	15	745	553	92	101	...	...
Ste. Marguerite.....					2	80	4	785	700	40	37	...	...
Seven Islands.....	2	36	1200	10	25	620	51	2671	2463	208	197	...	...
Moisie.....	1	54	300	4	23	1900	48	4087	3950	525	525	...	...
Pigou.....					4	120	6	250	250	200	200	...	...
Totals.....	4	99	1700	16	65	3080	124	8538	7916	1065	1060	....	....

the Number of Men employed, with the Kinds and Quantities of Fish, &c., in the of Quebec, for the Year 1891.

(Manicouagan to Jambons).

KINDS OF FISH.								FISH PRODUCTS.					Fish used for Local Consumption, brls.	VALUE.
Salmon, brls.	Salmon, fresh, lbs.	Cod, cwt.	Halibut, lbs.	Herring, brls.	Herring, smoked, bxs.	Trout, brls.	Cod Tongues and Sounds, brls.	Seal Skins, No.	Seal Oil, galls.	Porpoise Oil, galls.	Cod Oil, galls.	Fish used as Bait, brls.	Fish used as Manure, brls.	
.....		15		15			210	630		7	5	10	12	\$ cts.
.....	13745	390	300	188		6	178	890	70	195	10	5	18	712 80
.....	4445	72	850	39		1	140	700		36	3	2	6	6,214 00
.....	11040	353	550	96		3	5 22	110		176	9		15	1,982 40
.....	12633	2672	3000	105		2	40	200		1336	115		21	4,578 90
.....		50	100	8			5	25		25	1		2	16,264 00
.....	13647	5307	4450	138		3	15	1		2654	110	6	66	306 75
.....		227	100	6		1	1	3		113	3		75	29,353 75
.....		217	750	41			5	15		109	6	3	10	1,420 65
...	55510	9303	10100	636		16	20	602	2578	70	4651	262	26	1,342 35
													225	62,175 60

(Jambons to Pigou).

.....		602	5507	239	200	.....	10	.....	.....	482	45	.....	14	4,801 50
2	8139	162	200	8	.....	2	1	4	20	100	8	.....	5	2,559 80
1	20200	2255	2020	82	.....	1	13	47	316	104	1483	210	50	16,714 45
10	197200	2273	17000	.....	.....	5	6	33	188	.....	1515	345	.....	53,358 45
.....		300	500	.....	.....	.....	.....	10	50	.....	150	20	.....	1,542 50
13	225539	5592	25227	329	200	8	30	94	574	104	3730	628	50	78,976 70



RETURN showing the Number and Value of Vessels, Boats and

MINGAN SUBDIVISION

NAME OF DISTRICT.	VESSELS AND BOATS EMPLOYED IN FISHING.						FISHING MATERIAL.					
	Vessels.				Boats.		Nets.		Seines.		Trap-nets.	
	No.	Tonnage.	Value.	Men.	No.	Value.	Fathoms.	Value.	Fathoms.	Value.	No.	Value.
			\$			\$		\$		\$		\$
Chaloupe.....					6	120	10		30	30		
Little River.....					7	300	14		60	60		
Sheldrake.....					39	1560	91	300	150	220	400	4 1200
Thunder River.....	1	20	200	7	46	1900	92	80	40	120	220	1 380
Dock.....					20	800	42	20	10	30	25	
Ridge Point.....					14	500	28			30	10	
Jupitagan.....					3	75	6	100	50	30	25	
Magpie.....					60	2400	130	700	300	210	240	
St. Johns River.....					52	2080	120	1600	1550	80	250	
Long Point.....					10	400	22	150	200	140	150	
Mingan.....					1	20	2	100	75			
Romaine.....					1	30	1	75	50			
Esquimaux Point.....	17	682	17000	120	100	1400	180	1420	750	500	300	
Corneille.....					4	120	5	420	250			
Totals.....	18	702	17200	127	363	11705	743	4965	3425	1450	1710	5 1580

NATASHQUAN SUBDIVISION

Nabissipi.....					3	100	6	500	200			
Agwanus.....	1	18	400	7	9	300	15	600	250	24	20	
Isle à Michon.....					1	20	1	100	50			
Natashquan Harbour.....					28	1080	56	1240	620	120	200	
Little Natashquan.....	4	80	1400	28	16	640	37	1200	500	75	100	
Natashquan River.....					3	150	6	3200	1000			
Totals.....	5	98	1800	35	59	2290	121	6840	2620	219	320	

Fishing Materials, &c., in the County of Saguenay, &c.—Continued.

(Pigou to Watsheeshoo).

KINDS OF FISH.								FISH PRODUCTS.				Fish used for Local Consumption, barrels.	VALUE.	
Salmon, barrels.	Salmon, fresh, lbs.	Salmon, in cans, lbs.	Cod, cwt.	Halibut, lbs.	Herring, barrels.	Trout, barrels.	Seal Skins, No.	Seal Oil, galls.	Cod Oil, galls.	Fish used as Bait, barrels.	Fish used as Manure, barrels.			
			250						200	150		15	\$	cts.
			400						400	180		20		1,490 00
8			3200						3000	900	60	80		2,310 00
			3000				60	250	3000	1300	200	160		17,428 00
			1800						1800	500		20		17,565 00
			1200						1200	300		15		9,650 00
12			240						200	100		12		6,390 00
20			4500						4500	2400		250		1,550 00
	36000		3700	200					3500	2000	300	150		26,970 00
9			700				25	100	700	120	15	40		29,020 00
20	1510						60	250				25		3,992 75
	2860						10	40				2		897 00
			2000	750	260	2	1500	4500	1500	500		400		608 50
10							35	100				4		16,890 00
														259 75
79	40370	.....	20990	950	260	2	1690	5240	20000	8450	575	1193		135,021 00

(Watsheeshoo to English Point).

18	.....		70	.....			10	40	60	40	.....	20		795 50
21	.....		420	.....		2	12	50	400	130	.....	30		2,756 00
5	417													163 40
.....	200		1700	100	5	.....			1700	400		60		9,240 50
3	11370		840	400	10	.....	1173	5325	800	240	25	60		10,715 75
2	25013		70	100	10	3	10	40	60	40	.....	12		5,595 10
49	37000	.....	3100	600	25	5	1205	5455	3020	850	25	182		29,268 25

RETURN showing the Number and Value of Vessels, Boats and  
WASHEECOOTAI SUBDIVISION

NAME OF DISTRICT.	VESSELS AND BOATS EMPLOYED IN FISHING.						FISHING MATERIAL.					
	Vessels.				Boats.		Nets.		Seines.		Trap-nets.	
	No.	Tonnage.	Value.	Men.	No.	Value.	Fathoms.	Value.	Fathoms.	Value.	No.	Value.
			¢			¢		¢		¢		¢
Kegashka.....					3	132	3	120	120	20	25	
Mistassini Point.....					2	110	2	100	100			
Curlew Point.....					2	21	2	60	40			
Washeecootai River.....					3	37	2	100	100			
Romaine River.....					2	12	2	100	100			
Coacoachoo River.....					1	20	2	40	20			
Totals.....					13	332	13	520	480	20	25	

ST. AUGUSTIN SUBDIVISION

Wolf Bay.....					3	75	4	150	100	40	20		
Etamamu.....					1	20	2	150	120				
Point à Mourier.....					1	100	2	150	120				
Harrington.....					29	700	34	100	80	280	280	1	250
Little Meccatina.....					4	80	7	80	50	60	40	1	80
Whale Head.....					21	450	25	550	350	200	128	2	350
Mutton Bay.....					29	575	36	360	318	500	500	2	500
Grand Meccatina.....					3	75	6	100	94	200	200	1	200
La Tabatière.....					9	180	13	300	218	600	400	1	200
Grand Meccatina Island.....					2	50	2	150	136				
Kikapoe.....					4	97	4	467	347				
Poacoachoo.....					1	35	1	200	185				
Rigolet.....					3	60	3	340	245				
St. Augustin River.....					3	130	5	183	150				
St. Augustin Bay.....					2	50	2	200	108				
Cawcasippi.....					2	60	3	308	154				
Sandy Island.....					2	75	3	171	180				
Point à Giroux.....					1	30	1	150	100				
L'Anse à Portage.....					1	30	1	180	150				
Canso.....					1	40	1	150	100				
Chicatica.....					3	75	4	150	100	30	15		
Totals.....					125	2987	159	4589	3405	1910	1583	8	1580



Fishing Materials, &c., in the County of Saguenay, &c.—Continued.

(English Point to Coacoachoo).

KINDS OF FISH.									FISH PRODUCTS.			Fish used for Local Consumption, barrels.	VALUE.
Salmon, barrels.	Salmon, fresh, lbs.	Salmon in cans, lbs.	Cod, cwt.	Halibut, lbs.	Herring, barrels.	Trout, barrels.	Cod Tongues and Sounds, barrels.	Seal Skins, No.	Seal Oil, galls.	Cod Oil, galls.	Fish used as Bait, barrels.		
13			68	150			1	10	20	40	15	4	8 cts.
11			10			1				5	3	1	614 00
3			8							4	2	1	241 50
6												1	92 60
6								10	20			15	100 00
1								14	28			3	176 50
													56 70
40			86	150		1	1	34	68	49	20	25	1,281 30

(Coacoachoo to Chicatica).

1		120					9	27	100	24	5	674 05
20											2	328 00
2		40					100	300	28	8	2	488 20
5		1213		135					768	222	58	7,018 20
		260					500	1500	200	52	12	2,601 00
10		1473					1250	3750	1000	294	42	10,860 00
8		2980					400	1200	2715	580	68	16,746 00
2		212					40	120	175	42	6	1,241 00
7		223					1000	3000	183	45	20	3,786 20
1		33					100	300	20	6	4	442 50
7		48					178	534	30	10	8	823 10
3											2	56 00
5											6	104 00
2							18	54			6	100 10
3		65							50	13	4	396 00
12											4	208 00
3		46							31	9	4	296 90
4		47					35	105	32	9	2	395 55
6		25							16	4	2	228 90
2											2	40 00
8		240							160	48	8	1,376 00
111		7025		135			3630	10890	5508	1366	267	48,209 70

## RETURN showing the Number and Value of Vessels, Boats and

## BONNE ESPÉRANCE SUBDIVISION

NAME OF DISTRICT.	VESSELS AND BOATS EMPLOYED IN FISHING.						FISHING	
	Vessels.				Boats.			Nets.
	Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Fathoms.
			¢			¢		¢
Nabitippi....					1	40	2	240
Bull Cove. ....					2	100	2	440
Bay of Rocks....					6	500	12	200
Lydia's Cove....					2	140	4	300
Dog Islands....					2	140	4	600
Pêche à Lizotte.					2	60	2	220
Old Fort Island..					14	600	30	300
St. Paul's River..					3	150	4	1200
Bonne Espérance..	1	40	1500	10	75	5000	148	400
Burnt Island....					10	600	20	150
Pigeon Island....					10	700	15	250
Stick Point.....					6	400	8	600
Salmon Bay.....					40	3000	120	100
Little Fishery....					3	150	2	350
Five League.....					4	200	4	500
Middle Bay.....					20	1200	50	.....
Belles Amours....					2	60	2	100
Bradore Bay.....					20	800	30	1300
Long Point.....					20	700	30	3000
Green Island....					50	2000	100	500
Blancs Sablons....					5	200	8	1000
Totals.....	1	40	1500	10	297	16740	597	11750
								9150

Fishing Materials, &c., in the County of Saguenay, &c.—Continued.

(Chicatica to Blanc Sablons.)

MATERIAL.				KINDS OF FISH.				FISH PRODUCTS.				Fish used for Local Consumption, barrels.	VALUE.
Seines.		Trap-nets.		Salmon, barrels.	Cod, cwt.	Herring, barrels.	Trout, barrels.	Seal Skins, No.	Seal Oil, galls.	Cod Oil, galls.	Fish used as Bait, barrels.		
Fathoms.	Value.	Number.	Value.										
	¢		¢										\$ cts.
				2			3	10	40			5	110 50
				22	100		4	10	40	100	10	4	941 50
300	500	1	300	11	750			12	48	750	100	40	4,195 20
				13	50			15	60	50	10	4	526 75
				4	20			210	1050	20	10	8	891 50
				5								2	88 00
					400			45	225	400	400	20	2,786 25
				55			10	15	75			10	1,068 75
1600	3000	4	800	6	5000	20				5000	1000	300	27,386 00
300	300			1	1000			40	200	1000	200	20	5,426 00
400	600			5	600					600	200	10	3,360 00
100	200	1	200	10	100		6	27	162	100	40	6	892 55
1200	2000	1	200		4000					4000	1000	250	22,100 00
				10	60			43	215	60	50	5	688 75
200	200			7	50	250		180	900	50	100	5	2,237 00
1200	2000	1	200		2000			20	110	2000	500	100	11,019 00
					30			10	60	30	20	4	229 50
800	1000			1	2200			600	3000	1200	250	50	12,921 00
300	300	1	200		600			1500	7500	600	200	70	8,395 00
600	600	1	300		2000			500	2500	2000	500	100	12,575 00
200	300				200			540	2700	200	50	10	2,850 00
7200	11000	10	2200	152	19160	270	23	3777	18885	18160	4640	1023	120,688 25



RETURN showing the Number and value of Vessels, Boats and  
ISLAND OF ANTICOSTI

NAME OF DISTRICT.	VESSELS AND BOATS EMPLOYED IN FISHING.						FISHING MATERIAL.					
	Vessels.				Boats.		Nets.		Seines.		Trap-nets.	
	No.	Tonnage.	Value.	Men.	No.	Value.	Fathoms.	Value.	Fathoms.	Value.	No.	Value.
			\$			\$		\$		\$		\$
Fox Bay.....					20	600	50	600	300	200	100	.....
Salmon River.....					15	450	33	300	150			.....
Mauzerolle.....					6	180	20	200	100			.....
Wreck Cove.....					10	250	40	100	75			.....
Capelin Bay.....					2	80	4	200	100			.....
Macdonald's Cove.....					18	540	30	300	150			.....
Oil River.....					2	50	3					.....
English Bay.....					10	300	20	400	200			.....
Strawberry Cove.....					20	240	30	250	175			.....
Becsie River.....					1	20	1	50	25			.....
Jupiter River.....												.....
Shallop Creek.....					1	50	2	150	100			.....
Ellis Bay.....					4	75	10	150	100			.....
Goose Point.....					10	120	25	150	100			.....
South-west Point.....					1	25	1	50	50			.....
Totals.....					120	2980	269	2900	1625	200	100	.....

RECAPITULATION FOR THE

SUB-DIVISIONS.														
Point des Monts.....	5	75	2400	11	100	2530	123	4530	4320	590	605	1	300	
Moisie.....	4	99	1700	16	65	3080	124	8538	7916	1065	1060	.....	.....	
Mingan.....	18	702	17200	127	363	11705	743	4965	3425	1450	1710	5	1580	
Natashquan.....	5	98	1800	35	59	2290	121	6840	2620	219	320	.....	.....	
Washeecootai.....						13	332	13	520	480	20	25	.....	
St. Augustin.....						125	2987	159	4589	3405	1910	1583	8	1580
Bonne Espérance.....	1	40	1500	10	297	16740	597	11750	9150	7200	11000	10	2200	
Anticosti.....						120	2980	269	2900	1620	200	100	.....	
Totals.....	33	1014	24600	199	1142	42644	2149	44632	33936	12654	16403	24	5660	

Fishing Materials, &c., in the County of Saguenay, &c.—Continued.

SUB-DIVISON.

KINDS OF FISH.										FISH PRODUCTS.					Fish used for Local Consumption, barrels.	VALUE.
Salmon, barrels.	Salmon, fresh, lbs.	Cod, cwt.	Halibut, lbs.	Herring, barrels.	Herring, smoked, boxes.	Trout, barrels.	Cod Tongues and Sounds, brls.	Lobsters, in cans, lbs.	Seal Skins, No.	Seal Oil, galls.	Porpoise Oil, galls.	Cod Oil, galls.	Fish used as Bait, barrels.	Fish used as Manure, barrels.		
2		250	1000	50				86400	20	60		200	150	10	35	\$ 14,077 00
10								38400	190	570			100	10	8	6,188 50
		300	500	40				1440				210	25		5	1,923 10
		160						5184				100	60		5	1,595 76
2		80	250	40								55	10		2	642 00
3		700	1000	60								470	70		20	3,941 00
2		50							32	96		35	6		2	366 40
		250	3200	25								170	50	25	25	1,813 00
		400	6000	40								300	75	25	30	2,945 00
									10	30					2	32 50
9	500					5			5	15					2	164 25
								28800					40		4	4,108 00
								57600					80		4	8,200 00
2									10	30					2	64 50
30	500	2190	11950	255		5		217824	267	801		1540	666	70	146	46,211 01

COUNTY OF SAGUENAY.

....	55510	9303	10100	636	...	16	20	.....	602	2578	70	4651	262	26	225	62,175 60
13	225539	5592	25227	329	200	8	30	.....	94	574	104	3730	628	50	304	78,976 70
79	40370	20990	950	260	...	2	...	.....	1690	5240	..	20000	8450	575	1193	133,021 00
49	37000	3100	600	25	...	5	...	.....	1205	5455	....	3020	850	25	182	29,268 25
40	....	86	150	...	...	1	1	.....	34	68	....	49	20	....	25	1,281 30
111	....	7025	....	135	....	...	...	.....	3630	10890	....	5508	1366	....	267	48,209 70
152	....	19160	....	270	...	23	...	.....	3777	18885	....	18160	4640	....	1023	120,688 25
30	500	2190	11950	255	....	5	...	217824	267	801	....	1540	666	70	146	46,211 01
471	358919	67446	48977	1910	200	60	51	217824	11299	44491	174	56658	16882	746	3365	521,831 81

RETURN showing the Number and Value of Vessels, Boats and Fishing Materials, the Number of Men Employed, with the Kinds of Fish, &c., in the Gulf Division, in the Province of Quebec, for the Year, 1891.

TOTALS FOR THE GULF DIVISION.

NAME OF COUNTIES.	VESSELS AND BOATS EMPLOYED IN FISHING.										FISHING MATERIAL.				KINDS OF FISH.			
	Vessels.					Boats.					Nets.	Seines.		Trap Nets.	Smelts, lbs.	Salmon, barrels.	Salmon, fresh, lbs.	Cod, cwt.
	No.	Tonnage.	Value. \$	Men.	No.	Value. \$	Fathoms.	Value. \$	Fathoms.	Value. \$		No.	Value. \$					
Bonaventure .....	2	36	600	6	1,172	26,215	2,040	47,742	23,614	3,353	4,600	3,353	.....	4,800	.....	99,529	17,146	
Gaspe .....	19	851	22,400	189	3,111	91,573	5,158	106,848	60,767	6,519	6,007	6,519	.....	74,228	14	67,629	117,030	
Saguenay .....	33	1,014	24,600	199	1,142	42,644	2,149	44,632	33,936	16,403	12,654	16,403	.....	.....	474	358,919	67,446	
Totals.....	54	1,901	47,600	394	5,425	160,432	9,347	199,222	118,317	26,275	23,261	26,275	.....	79,028	488	526,077	201,622	

NAME OF COUNTIES.	KINDS OF FISH.										FISH PRODUCTS.					VALUE.		
	Haddock, cwt.	Halibut, lbs.	Herring, barrels.	Herring, smoked, boxes.	Mackerel, barrels.	Trout, barrels.	Reels, barrels.	Cod Tongues and Sounds, barrels.	Lobsters, in cans, lbs.	Seal Skins, No.	Seal Oil, gallons.	Porpoise Oil, gallons.	Cod Oil, gallons.	Fish used as Bait, barrels.	Fish used as Manure, barrels.	Fish used as Home Consumption, barrels.	\$ cts.	
Bonaventure .....	155	.....	684	1,120	33	.....	37	10	148,687	3	13,377	.....	4,812	83,652	10,466	219,216	43	
Gaspe .....	1,768	31,804	6,673	.....	4,485	25	12	158	594,484	9,485	43,045	105	76,900	22,934	8,786	8,857	865,559	
Saguenay .....	.....	48,977	1,910	200	.....	60	.....	51	217,824	11,299	44,491	174	56,658	16,882	746	3,365	521,831	
Totals. . . . .	1,923	80,781	9,267	1,320	4,518	85	49	219	960,995	20,787	87,542	279	146,935	44,628	93,184	22,688	1,606,607	35



**Yield and Value of the different Fisheries of the Gulf Division, Province of  
Quebec, for the Year 1891.**

Description.	Quantity.	Price.	Value.
		\$ cts.	\$ cts.
Smelts, fresh.....Lbs.	79,028	0 05	3,951 40
Salmon do.....do	526,077	0 20	105,215 40
do salt.....Brls.	488	16 00	7,808 00
Cod, dry.....Cwt.	201,622	4 50	907,299 00
Haddock, dry.....do	1,923	3 50	6,730 50
Halibut.....Lbs.	80,781	0 10	8,078 10
Herring, salt.....Brls.	9,267	4 50	41,701 50
do smoked.....Boxes.	1,320	0 25	330 00
Mackerel, salt.....Brls.	4,518	14 00	63,252 00
Trout do.....do	85	10 00	850 00
Eels do.....do	49	10 00	490 00
Cod tongues and Sounds.....do	219	10 00	2,190 00
Lobsters, cans.....Lbs.	960,995	0 14	134,539 30
Seal skins.....Pieces.	20,787	1 25	25,983 75
Seal oil.....Galls.	87,542	0 40	35,016 80
Porpoise oil.....do	279	0 40	111 60
Cod oil.....do	146,935	0 40	58,774 00
Fish, as bait.....Brls.	44,628	1 50	66,942 00
do manure.....do	93,184	0 50	46,592 00
do for local use.....do	22,688	4 00	90,752 00
Total value for 1891.....			1,606,607 35
do 1890.....			1,174,948 96
Increase for 1891.....			431,658 39

**Statement of Lobster Canneries for Gulf Division, Season of 1891.**

**COUNTY OF BONAVENTURE.**

No.	Division.	Number of Traps.	Value of Traps, Boats, &c.	Value of Cannery and Plant.	Total Value.
			\$ cts.	\$ cts.	\$ cts.
2	Carleton sub-division.....	720	780	800	1,580
4	Bonaventure do.....	3,100	3,100	1,925	5,025
5	Port Daniel do.....	2,700	3,600	3,350	6,950
11	Total.....	6,520	7,480	6,075	13,555

**COUNTY OF GASPÉ.**

5	Grand River sub-division.....	4,000	4,000	3,750	7,750
5	Gaspé sub-division.....	3,050	3,071	3,500	6,571
18	Magdalen Islands sub-division.....	25,100	25,000	14,500	39,500
28	Total.....	32,150	32,071	21,750	53,821

**COUNTY OF SAGUENAY.**

7	Island of Anticosti.....	8,500	10,000	4,000	14,000
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**TOTAL OF LOBSTER CANNERIES IN GULF DIVISION.**

11	County of Bonaventure.....	6,520	7,480	6,075	13,555
28	do Gaspé.....	32,150	32,071	21,750	53,821
7	do Saguenay.....	8,500	10,000	4,000	14,000
46	Totals.....	47,170	49,551	31,825	81,376

## Value of Material employed in Gulf Fisheries, Season of 1891.

Description.	Value.
	\$ cts.
Vessels, 54 of 1,901 tons.....	47,600
Boats and Flats, 5,425.....	160,432
Nets, 199,222 fathoms.....	118,317
Seines, 23,261 do .....	26,275
Trap nets, 25 do .....	5,960
46 Lobster canneries and plant.....	81,376
Total.....	439,960

## Number of Men employed in Gulf Fisheries, Season of 1891.

Description.	Number.
Sailors.....	394
Fishermen and shoremen.....	9,347
Total.....	9,741

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SYNOPSIS OF FISHERY OVERSEERS' REPORTS IN THE PROVINCE  
OF QUEBEC, EXCLUSIVE OF THE GULF DIVISION, FOR  
THE YEAR 1891.

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SOUTH SHORE RIVER ST. LAWRENCE, FROM CAPE CHATTE TO POINT LEVIS.

*Overseer J. Joncas* reports a general increase in the value of the fisheries of his division. This he attributes to a larger number of men being engaged in fishing and more nets being used than formerly. Salmon net fishing opened propitiously; the fish seemed abundant but the prevalence of strong north-east gales during a whole fortnight injured several nets and somewhat hampered the chances of a fair catch. Forty salmon were killed with the fly in Matane River. With the exception of the immediate vicinity of the saw mill, where a few fish may have been speared, no poaching took place in the river. The only possible way to prevent this illegal killing of salmon at the mill, would be to put a wire net at the entrance of the mill race so as to prevent the fish from going near the mill. A barrier of this kind would cost about \$100. The Sawdust Act was pretty generally observed, only one complaint coming to this officer's notice, which is still under investigation. The total value of the fisheries of this division is computed at \$12,148, being an increase of over 70 per cent over that of last year.

*Overseer L. S. E. Grondin*, reports a failure in the catch of sardines and other small fish, without being able to account for it. His returns, however, show an increased yield in salmon and herring, the latter especially; one fishery alone at Métis having taken over 10,000 barrels. This officer heard of no violations of the fishery laws. The value of the fisheries of his division is set down at \$63,339, being nearly double that of the previous year.

*Overseer Herm. Martin* reports an increased yield in nearly every kind of fish, especially in salmon and herring, the latter showing a surplus of 100 per cent over 1890. Shad fishing was a complete failure. No reasonable causes can be ascribed for the disappearance of these fish from the coast. The South-West Bic River should be better attended to by its lessees, especially during the spawning season. It is reported that only three salmon were killed with the fly in that stream last summer. In the Rimouski River, 24 salmon averaging 15 pounds each, were caught. Illegal trout fishing is carried on to a considerable extent in the back lakes, not only in this but in other districts of the vicinity. Something should be done to check the illegal netting of trout. The yield of the fisheries of this division nearly doubled, amounting to \$28,117.

*Overseer Napoléon Levesque* reports that, owing to unfavourable winds, the fisheries of his district yielded less than during last year. This applies more especially to shad and sardines. Salmon shows a slight improvement over the catch of last year. The various close seasons were well observed. The value of the fisheries of this division only amounted to \$39,564, being a decrease of 35 per cent when compared with the yield in 1890.

*Overseer Xavier Pelletier* says that eel fishing is the most important industry of his district. Eel weirs are constructed with brush or laths; some have net leaders, others have not. At River Ouelle nearly 26,000 lbs. of eels were caught. Twenty porpoises were killed this season, against 141 last year. The total value of the fisheries of this division reached \$25,000, being an increase of about \$5,000 over last year.

*Mr. Eugene Pelletier* reports another failure in the catch of shad, while no plausible reasons can be adduced for the steady decline of this fishery during the past few years. Smelts were so abundant at one time that they could be dipped out with buckets, the water being literally thick with them. A slight decrease occurs in salmon. Other fisheries hold their own or show signs of improvement. One gill net and one eel weir, unlawfully set, were confiscated and destroyed. The total value of the fisheries in this district amounted to \$18,000, a decrease of 40 per cent.



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NORTH SHORE RIVER ST. LAWRENCE, FROM QUEBEC TO BERSIMIS.  
QUEBEC AND MONTMORENCY DIVISION.

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*Overseer L. P. Huot* reports a general decrease in the fisheries of his division. This scarcity was not only felt in his, but in all other districts in the neighbourhood of Quebec. The disappearance of shad is beyond the comprehension of the oldest fishermen. In places where, some years ago, 6,000 or 7,000 shad were taken, only 148 were caught this year. The small yield of eels is explained by the fine weather which prevailed during the fall, it being now a well established fact that the best catch of eels is made during the rainy and windy seasons. No violations of the law came under this officer's notice. All the fish caught in this division, valued at \$9,000, is sold on the Quebec markets.

*Overseer Ulysse Bhureau* also reports a considerable decrease in the yield of the fisheries of his division. The catch of salmon was about the same as that of 1890. To the great disappointment and loss of Isle aux Coudres fishermen, not a single porpoise was killed, where a few years ago as many as 145 were taken in these fisheries. Sardines and capelin were abundant, and large supplies were taken for home consumption. No violations of the fishery laws came to this officer's notice. The total value of the fisheries of the Murray Bay division, including the lakes in rear of Bay St. Paul, amounts to about \$13,000, a decrease of nearly 50 per cent.

*Overseer L. N. Catellier* states that the fishermen of his division are satisfied with last season's catch. Salmon net fishing turned out very good. Anglers and guardians report that the tributaries of the Saguenay are better stocked than ever with parent fish. There were killed 280 porpoises and 25 sharks at Pointe a Carriole fishery. The fishway on the St. John River has been kept in good repair, that on River à Mars in Mr. George Tremblay's mill dam, having been found defective, was replaced by a better one. Two brush fisheries having been found with their gates closed on Sunday were destroyed and the owners fined. A salmon net set without license was also destroyed. The product of the fisheries of the Saguenay division is valued at \$27,682.

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FROM QUEBEC TO UPPER OTTAWA.

SHERBROOKE AND MEGANTIC DIVISION.

*Overseer P. W. Nagle* reports a slight improvement in the fisheries of the County of Stanstead. The opening of Magog River and Little Lake to trout fishing contributed to this improvement. Fishways were kept in good repair, and no obstruction to the ascent of fish now exists on the rivers of this division. The several close seasons were well observed and the overseer is unaware of any abuses at present. He estimates the values of the fish, trout or lunge, caught in his division at about \$3,000.

*Overseer Joel Shurtleff* reports, that owing to defective fishways and an accumulation of sawdust, the waters of Compton County show a decline in the yield of fish. Every mill dam should be provided with a fishway. There are now five or six fishways which were kept in good repair. Improvements are being adopted to dispose of the sawdust next season, and he hopes that the law will be better obeyed in the future. The close seasons are reported as having been fairly observed.

*Overseer A. L. Darche* reports a decline in the yield of trout and bass, but a fair catch of pickerel in the Megantic division. Sawdust is the only nuisance in this district. The four fishways under his charge were kept in good working order.

*Overseer P. C. Bourk* states that, owing to sawdust, the streams of Megantic County are not improving. Angling only is practiced in those waters, and all fish caught are used for domestic consumption. There are no fishways in this division, and he recommends the building of two, so as to enable fish to ascend to the upper lakes. The fishery laws are well observed. The total value of the fisheries of the Sherbrooke and Megantic divisions is computed at \$11,404.

## MAGOG AND BROME.

*Overseer N. A. Beach* estimates the catch of lunge in Lake Memphremagog at 18,000 lbs.; bass, 6,000 lbs.; pickerel, 2,000 lbs., and coarse fish, 40,000. Some fishermen who have been in the habit of selling fish to hotels for years, are of opinion that from 50 to 60 tons of trout are taken every year in the above-named lake, but Mr. Beach thinks this statement is grossly exaggerated.

*Overseer W. G. Greene* reports that trout, bass and pickerel are the principal kinds of fish found in Lake Memphremagog. The former seemed to be abundant on the spawning grounds last season. To properly protect this part of the lake during the close season, temporary assistance is required. The close season for lunge should commence on the 1st October, instead of the 15th, as at present, as they are seen in large quantities on the shoals before the 12th of that month. The first part of the close season was not very well observed; but a few seizures from purchasers of illegally caught fish, as well as from fishermen, had the desired effect of checking illegal fishing. About twenty parties were fined from \$5 to \$10 each for violations of the law. Two boats, one seine and three gill nets were confiscated for being used illegally. The value of the fish caught in this division is estimated at \$3,000.

## MISSISQUOI BAY DIVISION.

*Overseer P. E. Luke* reports a decrease in the catch of fish, especially in shad. The result is ascribed to low water. The close seasons were well observed. The lower fishway on Pike River was considerably damaged by ice last spring, but has been thoroughly repaired since. The dam is now owned by responsible parties, and no trouble is anticipated in getting an efficient fishway placed therein. The total value of the fisheries of this division only amounted to \$3,700, while last year it reached \$5,000.

## IBERVILLE DIVISION, INCLUDING RICHELIEU RIVER.

*Overseer J. B. Chevalier* states, that although the fishing season lasted until the end of December, the yield was below that of 1890. This scarcity of fish is attributed to the former excessive use of hoop-nets (*verveux*) in that part of the Richelieu River. Eels are the staple fish of this division; the most important weir of the locality caught 18,000, which brought remunerative prices on the United States markets. Owing to the proximity of the markets, fishermen secure remunerative prices even for coarse grades of fish. The total value of the fisheries of this division at schedule prices does not reach \$5,000.

*Overseer J. O. Dion* reports, that with the exception of pickerel, the other kinds of fish are steadily becoming scarcer. The Chambly eel weir was not so productive as usual, catching only 4,240 fish. During the summer, people got excited over the hundreds of coarse fish, mostly carp and cat fish, being washed ashore. No plausible cause is ascribed to this occurrence. Mr. Dion again urges the construction of a proper fish-way in the Government dam at St. Ours. The fishery regulations were generally well observed, and it is expected that recent prosecutions will have a beneficial effect. The value of the fisheries of this division does not reach \$1,200.

## CHATEAUGUAY DIVISION.

*Overseer Joachim Laberge* reports a decrease in the yield of sturgeon and eels, but the catch of other kinds of fish has been good. Several parties who used to fish with seines and nets adopted line fishing and did quite as well with less cost and labour. Large quantities of carp were caught by farmers when the water got very low. He recommends the prohibition of all kinds of fishing in Chateauguay River between 15th April and 15th June in each year. The total catch of this division valued at \$17,680 was all disposed of in Montreal and Lachine markets at fair prices.



## BEAUHARNOIS DIVISION.

*Overseer John Kelly* reports the catch of fish in his division just as good as in 1890. The water kept very low. The close seasons were fairly well observed, and the fishways were kept in good order. He recommends a total prohibition of seine or gill net fishing for a few years in order to give the waters of his division a chance of getting fully restocked, otherwise he fears that in a few years, very few fish will be caught with hook and line. The total value of the fisheries of this division nearly reaches \$11,000.

## LAPRAIRIE AND VERCHERES DIVISION.

*Overseer John Morris* states that the water kept very low, and to this cause he attributes the fall off in the bass, doré and maskinonge fisheries, while the coarse fish were abundant. Eels show a large decrease from last year's catch. Mr. Morris remarks that never before was the law so well observed. The total yield of this division is valued at \$18,150, a decrease of over 50 per cent.

## NICOLET DIVISION.

*Overseer George Boisvert* reports shad a complete failure and a decrease in all kinds of game fish, but an increase in the catch of coarse fish. He feels inclined to believe that fishermen intentionally underrate their catch for the purpose of obtaining the withdrawal of the license system. Fishermen abuse the privilege of taking soft fish during the close season; none of them liberate bass or pickerel when they catch them, but they hide the fish and dispose of them to private houses. Were all kinds of fishing prohibited until the 15th May this would be avoided. The total value of the fisheries of this division comes to about \$6,000.

## BERTHIER AND MONTCALM DIVISIONS.

*Overseer S. A. Grant* complains of the difficulty he has to encounter with the fishermen in getting correct returns of their catch of fish or even the quantity and number of fishing apparatus used by them. He reports a larger catch than last year. The total value of fish caught in this division set down at \$8,515, includes trout from the inland waters of Montcalm estimated at over 34,000 lbs.

## TERREBONNE DIVISION.

*Overseer Joseph Lauzon* says that with the exception of shad, the fish in his division were more abundant than last year. The fishery regulations were well observed; a few poachers from Boucherville were however detected and fined.

*Overseers Cloutier and Filiatrault* report speckled trout as abundant as ever in the inland lakes of Terrebonne. The catch by sportsmen and settlers is estimated at 53,000 lbs., which is as high as last year. The total value of the fisheries of the whole of this division is estimated at \$6,663.

## LAKE TWO MOUNTAINS AND ISLE PERROT DIVISION.

*Overseer Theo. Sabourin* sends no report. He estimates the catch of the Rigaud division at about 40,000 lbs.

*Overseer Julien Monpetit* says that some fishermen of his division report fish more abundant than usual, others fearing an increase in the license fee, purposely lower their catch. Reports of illegal seining at night and of killing fish with explosives, reached this officer, but he could find no proof. The total value of the fisheries of this division reaches \$4,364, an increase of over \$1,000 over that of last year.

## LOWER OTTAWA DIVISION.

*Overseer Robt. W. Jones* reports a falling off in the yield of the fisheries of the Lower Ottawa. This was caused as much by a less vigorous prosecution of fishing



as by a scarcity of fish. Owing to the construction of a railway in the locality, several preferred the regular wages to the uncertain yield of the waters. There are no fishways in this district. The close seasons were well observed. The total value of the fisheries of this division is given at \$3,900, a decrease of about twelve per cent.

UPPER OTTAWA AND GATINEAU LAKES DIVISION.

*Overseer Joseph Marion* reports the yield of fish to be nearly the same as last year. The injury caused by sawdust to the higher grades of fish being the same, it is unnecessary for him to repeat what he has already said about the matter in previous reports. The fishermen earnestly pray for the day when this nuisance will be entirely stopped or abated. The Government dam at Carillon is still unprovided with a fishway, and this is a great drawback to the success of the fishermen of this division. There were fifty-one men fishing this season for local markets and their catch consisted chiefly of maskinongé, pickerel, pike, sturgeon, carp, suckers, catfish, etc. These fish are disposed of on the Ottawa markets at ten cents per string of fish averaging two lbs. each. At Rockland and Buckingham, a good many fish are peddled in the villages. On Lake des Chênes, only fishing with hook and line is allowed. About 10,000 lbs. of fish were thus caught and sold in Aylmer, Hull, etc.

On the Gatineau lakes fishing was good. On Thirty-One Mile and Pemichogan there were caught 5,750 lbs. of grey trout; 3,500 lbs. of bass; 6,300 of whitefish, and 2,650 lbs. of pike; all sold on the Ottawa markets. Eight persons fished on Cedar and Blue Sea Lakes for about six weeks averaging 300 lbs. of grey trout per week. On Round Lake, one fisherman alone caught about 4,500 lbs. of red and grey trout, pickerel, bass and pike. Angling for speckled trout was very good. This is mostly due to the formation of new clubs everywhere, by means of which the fish are efficiently protected during the breeding period. Some of the lessees of these lakes have erected costly buildings, improved the roads and furnished their places with every possible convenience. They also keep a regular staff of guardians which are of great assistance in preventing poaching and preserving the fish and game. Among the best protected waters, are Lake St. Germain and Plombs Lakes in Denholm, Echo Beach Lake in Villeneuve, Graham and other lakes in Mulgrave, Meache's Lake in Hull, etc., etc.

*Warden Joynt* states that very little fishing was done by the members of the club who have a lease of Lake Bernard. Their catch is estimated at only 600 lbs. of bass and 250 lbs. of trout. Fish are, however, on the increase. About 1,800 lbs. of bass and trout were caught in Long Lake; 1,600 lbs. in Mahon's Lake; 2,200 lbs. in Sinclair's Lake; the same in Nelson's Lake, and 1,200 lbs. in Wolfe Lake. In each of the other small lakes in his district there were about 400 lbs of trout caught. The close seasons were well observed.

## STATISTICS OF FISHERIES IN THE PROVINCE OF QUEBEC

RETURN of Fishing Stations, Number and Value of Fishing Boats and Nets, Number the River St. Lawrence, from Cape Chatte

NAME OF PLACES.	FISHING BOATS.		No. of Fishermen	KINDS OF NETS USED.						
	Gill Nets.			Brush Fisheries.		Eel Fisheries.				
	No.	Value.		No.	Fathoms.	Value.	No.	Value.	No.	Value.
		\$				\$		\$		\$
Capucins.....	16	240	32	1	40	40				
Mechins.....	53	800	79	3	125	125	1	20		
Grosses Roches.....	6	90	13	1	45	45				
Ste. Félicité.....	29	435	49				7	140		
Matane.....	17	255	31	2	65	65	11	220		
Rivière Blanche.....	5	75	12				3	60		
Sandy Bay.....	11	220	11							
Métis.....			8				8	200		
Ste. Flavie.....	4	80	4							
Ste. Luce.....			14	1	80	25	13	340		
Pointe au Père.....			14				14	365		
Rimouski.....			3				3	65		
Sacré Cœur.....	12	240	26				10	535	4	80
Rivière Hâtée.....	10	75	27				14	465		
Cap à l'Orignal.....	5	35	16	1	150	40	9	280		
St. Simon.....	1	10	16				5	135	7	62
St. Fabien.....			10				7	123	2	18
Inland waters of Rimouski.....										
do Co. Temiscouata, including										
Touladi.....										
Notre Dame des Sept Douleurs.....	9	1000	36				22	2400		
Isle aux Pommes.....	1	100	2				1	75		
Trois Pistoles.....			11				10	1000		
Isle Verte.....	2	300	28				12	1200	2	50
Cacouna.....			19				17	2200	3	75
Rivière du Loup.....			7				3	300	4	100
Notre Dame du Portage.....			9				4	300	9	125
St. André.....			18				7	840	11	198
Kamouraska.....			11				5	400	6	142
St. Denis.....			19				5	250	14	350
Rivière Ouelle.....			45				1	160	44	1275
Ste. Anne de la Pocatière.....			24				1	50	23	680
Inland waters, Co. L'Islet.....										
St. Roch.....			40				1	150	39	3000
St. Jean.....			50						50	3860
Trois Saumons.....			3						3	160
L'Islet.....			35						42	3360
Anse à Gilles.....			4						6	560
Cap St. Ignace.....			16				7	630	9	460
Ile aux Grues.....			24						24	2400
St. Thomas.....	1	12	21				7	1500	14	660
Berthier.....	4	40	20				3	1650	17	550
St. Valier.....	6	170	2				2	4000		
St. Michel.....	5	55	5				5	2800		
Beaumont.....	9	240	4				4	2200		
Point Lévis.....	11	400	7				6	3050		
Totals.....	217	4872	825	9	505	340	228	28103	333	18165

EXCLUSIVE OF THE GULF OF ST. LAWRENCE.

of Men, together with the Yield, Value and Kinds of Fish, &c., on the South Shore of to Point Lévis, during the Year 1891.

KINDS OF FISH.										FISH PRODUCTS.			VALUE.
Salmon, lbs.	Trout, lbs.	Shad, lbs.	Herring, barrels.	Eels, lbs.	Sturgeon, lbs.	Sardines, barrels.	Whitefish, lbs.	Pickarel, lbs.	Coarse and Small Fish, barrels.	Fish for Manure, barrels.	Porpoise Skins.	Porpoise Oil, gallon.	
			50						410				8 cts.
1650	400		300						608				1,455 00
375			60						90				3,544 00
	600		350			150			220	100		375	615 00
1500	4000		150			200			75	450		390	2,945 00
300			135			50			21	75		225	2,581 00
			125										1,008 00
900			10720										562 50
55									20				48,420 00
6210			792			20				300			71 00
2310			1480			10				200			5,016 00
255			437										7,252 00
1320		220	1150	11600		165			24	900			2,017 50
3600		125	2860			28			18	730			7,165 20
2970		174	700			35			13	300			13,700 50
1050		33	205	3210		12			4	325			4,048 44
3900		108	30	2400						1200			1,537 58
	10000												1,665 48
													1,000 00
	12000												1,200 00
1600		1500	1500		400	200			3000	80			16,824 00
			6			7			2000	10			6,053 00
525			300		600	20			500	50			3,076 00
500		55	200	500	200	110			200	60			2,005 30
2500		1000	400	1000	400	307			900	200			6,165 00
2200		200	180	600	600	200			1000	120			4,994 00
				5700		4			30	6			447 00
60				7110	3200	2750				230			8,995 60
400		1075		5250	1600	2180				2200	9	540	8,447 50
1040		3750		11550	2200	400				150			2,533 00
500		1500		56000	600					100	11	660	3,944 00
20				14430	200					250	1	60	1,034 80
	5000												500 00
				11000	600								696 00
				21011					110				1,590 66
				310					5				33 60
				16070					95				1,249 20
				1860									111 60
				2740	11200		2300	1300	23				1,154 40
				31660					19				1,956 60
100		70		6000	28500		8420	683	24				1,873 95
240		774		14260	2976		9950	650	13				1,996 10
350		1750		20200	5425		9900	250	14				2,358 95
800		1720		15000	2050		3900	1050	16				1,698 70
430		3279		7200	3600		2400	1220	12				1,219 74
950		3600		12600	1500		2700	550	18				1,549 50
38610	32000	20933	22130	279261	65851	6848	39570	5703	9482	8036	21	2250	189,912 45



RETURN of Fishing Stations, Number and Value of Fishing Boats and Nets, together  
Lawrence, from Quebec to

NAME OF PLACES.	FISHING BOATS.		Number of Fishermen.	KINDS OF NETS USED.						
	No.	Value.		Gill Nets.			Brush Fisheries.		Eel Fisheries	
				No.	Fathoms.	Value.	No.	Value.	No.	Value.
<i>Island of Orleans.</i>		\$			\$		\$		\$	
St. Laurent.....			6	6	2100	1520				
St. Jean.....			6	5	970	665			1	50
St. François (south side).....			16	2	600	600			14	900
Argentenay.....			9						9	500
St. François (north side).....			6				6	180		
Ste. Famille.....			12				10	290	2	80
St. Pierre.....			5	5	1100	1000				
<i>North Coast.</i>										
Isles Madame and aux Réaux.....			4	3	600	360			1	100
St. Joachim.....			25						25	2200
St. Anne.....			5				1	20	4	70
Chateau Richer.....			4	1	300	600	3	60		
Bay St. Paul and neighbouring lakes in the County of Charlevoix.....			27						43	1040
Ile aux Coudres.....			41				20	110	75	300
St. Irénée.....			15				19	200		
Les Eboulements.....			24				27	240	30	150
Malbaie.....	5	50	22	2	170	40	20	280		
St. Fidèle.....	3	25	17	1	80	20	6	60		
St. Simeon.....	3	24	10	2	130	50	5	70		
<i>Saguenay Division.</i>										
Rivière aux Canards.....	2	30	2				2	40		
Anse Ste. Catherine.....	2	30	2				2	50		
Tadoussac.....	3	45	5	1	100	40	1	30		
Pointe Rouge.....	1	50	3	2	200	200				
Moulin Baude.....	1	20	1	1	80	50				
Anse Puante.....	1	15	1	1	150	75				
Pointe à la Cariole.....	1	20	1	1	100	50				
Anse aux Pilotes.....	2	40	2	2	200	125				
Escoumains.....	4	50	8	3	300	150	5	100		
Baie des Bacons.....			2				2	50		
Sault au Mouton.....			2				2	50		
Mille Vaches.....			3				3	70		
Pointe à Boisvert.....	1	15	4	1	160	80	3	75		
Portneuf.....	2	30	2	1	150	75	1	20		
Sault au Cochon.....	1	15	1	1	120	60				
Colombier.....	2	300	5	4	400	200				
Islets Jérémie.....	1	20	1	1	140	70				
Bersimis.....	1	15	2	1	160	80	1	20		
Inland waters.....										
<i>Lake St. John Division.</i>										
St. Joseph d'Alma to Roberval.....			175	175	7000	1000				
Totals.....	36	794	476	222	15310	7110	139	2015	204	5390

\* 100,000 lbs. winninish included in the value of these estimates.

with the Yield, Value and Kinds of Fish, &c., on the North Shore of the River St. Beršimis, during the Year 1891.

KINDS OF FISH.											FISH PRODUCTS.				VALUE.	
Salmon, lbs.	Trout, lbs.	Shad, lbs.	Herring, brls.	Eels, lbs.	Sturgeon, lbs.	Sardines, brls.	White Fish, lbs.	Pickarel, lbs.	Pike, lbs.	Coarse and Small Fish, brls.	Fish for Manure, brls.	Porpoise Skins, No	Porpoise Oil, galls.			
590		255		10600			2520	792						\$	cts.	
760		210		10000			2640	1800								
250		66		16100			1200	840								
				9800												
				1300	4		732	600		36						
				1430	9		1920	1476		109						
120		33		7800	1		3840	2280								
550		150		7000	12		2220	1080								
				22560												
				2250			720	480		2						
20		4		1320	18		2880	1920		31						
	51000			18600												
				4000		50				10	400					
			10			100				5	2500					
			4	1600		100				10	1800					
700			56			70				11	2700					
400			17			20					700					
700			20			35					500					
600										10	100					
360										15	300	105	6300			
400			40								800	50	3000			
13000																
5000																
600																
9000												125	7500			
6760																
5820			15							10	400					
540			25							5	200					
200			5							3	100					
440			13							16	150					
4760			30							4	200					
4100			5							3	50					
2980																
5800																
3600																
980																
	37000															
	10000						20000	48000	24000	500				*	8,300 00	
69030	98000	718	240	114360	44	375	38672	59268	24000	780	10900	280	16800		62,130 84	

RETURN of Fishing Stations, Number and Value of Fishing Boats and Nets, Number  
extending from Quebec to Upper

DIVISIONS.	FISHING BOATS.		Number of Fishermen.	KINDS OF NETS USED.								
				Gill Nets.			Seines.		Brush Fish-eries—Hoop Nets.		Eel Fisheries	
	No.	Value.		No.	Fathoms.	Value.	Fathoms.	Value.	Number.	Value.	Number.	Value.
		¢			¢		¢		¢		¢	
Sherbrooke and Megantic.....			60									
Magog and Brome.....			30									
Missisquoi Bay.....	14	150	35				2332	600				
Iberville (including Richelieu River).....	35	470	38				410	350	76	1370	6	9000
Chateauguay.....	91	1630	150	4	280	80	460	360				
Beauharnois.....	46	590	90				520	820				
Laprairie to Verchères (including Montreal and vicinity).....	32	320	101				960	600				
Richelieu County (including St. Francis River).....	76	500	76	25	500	100	750	500			67	930
Yamaska County and River.....	100	430	134				1300	160			7	125
Nicolet.....	47	310	49	30	570	50	480	150			36	90
Three Rivers*.....	17	170	17									
Berthier, Joliette and Montcalm.....	106	600	106	8	120	10	42	25				
Terrebonne.....	50	400	50	10	150	85	176	176			21	50
Lake Two Mountains (including Isle Perrot).....	37	330	50	33	465	120			37	110		
River Beaudet.....			8	2	30	25	120	100				
Lower Ottawa.....	10	180	11	10	760	325						
Upper Ottawa.....	90	890	89	580	20100	2320						
Gatineau Lakes.....												
Totals.....	751	6970	1094	702	22975	3145	7550	3841	113	1480	137	10195

\* Estimated. The total value includes \$7,500 for 15,000 bushels of tom cods.



of Men, together with the Yield, Value and Kinds of Fish, &c., within the District  
Ottawa, during the Year 1891.

KINDS OF FISH.										VALUE.
Trout, lbs.	Shad, lbs.	Eels, lbs.	Sturgeon, lbs.	Whitefish, lbs.	Maskinongé, lbs.	Bass, lbs.	Pickereel, lbs.	Pike, lbs.	Coarse and Small Fish, lbs.	
37350	12150	14300	7000	2000	17800	19100	21350	19250	41950	\$ cts.
30000	3000	.....	.....	3000	.....	14000	10000	.....	70000	11,404 50
.....	12340	.....	.....	.....	.....	.....	32440	.....	44400	6,860 00
.....	.....	57300	.....	.....	.....	1020	1800	5050	69800	3,694 40
.....	.....	20000	60000	.....	8000	40000	30000	50000	200000	5,935 70
.....	.....	37500	41000	.....	4160	6500	11400	23000	129000	17,680 00
.....	500	100000	25000	10000	35000	2000	18000	50000	140000	10,939 60
.....	.....	80300	1200	.....	320	400	5850	2100	14000	18,150 00
.....	.....	9560	2520	100	2600	1000	2850	12300	127200	5,750 70
.....	600	14750	5340	520	100	500	1500	1200	150000	5,522 30
20000	1000	15000	5000	.....	.....	.....	10000	20000	25000	5,954 00
34300	1000	4750	2250	1000	735	20	4210	8510	128150	13,010 00
53000	900	4520	1840	.....	1400	5900	5300	4500	.....	8,515 80
.....	900	7400	10700	.....	11120	7730	11930	11700	30400	6,663 60
.....	.....	25000	7000	.....	700	600	600	600	1000	4,364 50
1200	2400	2100	16000	7200	1100	750	6000	10000	36000	2,088 00
.....	.....	3600	9500	.....	4500	.....	13400	7500	60200	3,917 00
121500	.....	.....	.....	13500	.....	14850	.....	35000	.....	3,907 00
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,871 00
297350	34790	396080	194350	37320	87535	114370	186630	260710	1267100	150,228 10

## COMPARATIVE RECAPITULATION

Of the Quantity and Value of the different Fisheries from Cape Chatte to Point Lévis, in 1890 and 1891.

Kinds of Fish.	Prices for 1891.	1890.		1891.	
		Quantity.	Value.	Quantity.	Value.
	\$ cts.		\$ cts.		\$ cts.
Shad..... Lbs.	0 06	23,998	1,619 88	20,933	1,255 98
Eels..... "	0 06	425,980	25,558 80	279,261	16,755 66
Herring..... Brls.	4 50	12,730	50,920 00	22,130	99,585 00
Sturgeon..... Lbs.	0 06	57,770	3,466 20	65,851	3,951 06
Sardines..... Brls.	3 00	6,164	18,492 00	6,848	20,544 00
Trout..... Lbs.	0 10	35,300	3,530 00	32,000	3,200 00
Salmon..... "	0 20	24,630	4,926 00	38,616	7,722 00
Whitefish and bar fish..... "	0 08	54,000	4,320 00	39,570	3,165 60
Pickarel..... "	0 05	6,330	379 80	5,703	285 15
Coarse and mixed fish..... Brls.	3 00	13,108	39,324 00	9,482	28,446 00
Porpoise skins..... No.	4 00	318	1,272 00	21	84 00
do oils..... Galls.	0 40	19,080	7,632 00	2,250	900 00
Fish as manure..... Brls.	0 50	9,020	4,510 00	8,036	4,018 00
Seal skins..... No.	1 00	42	42 00		
do oils..... Galls.	0 40	420	168 00		
Total value of the fisheries.....			166,160 68		189,912 45
Increase.....					23,751 77

## COMPARATIVE RECAPITULATION

Of the Quantity and Value of the different Fisheries, from Quebec to Bersimis, in 1890 and 1891.

Kinds of Fish.	Prices for 1891.	1890.		1891.	
		Quantity.	Value.	Quantity.	Value.
	\$ cts.		\$ cts.		\$ cts.
Shad..... Lbs.	0 06	4,300	250 80	718	43 08
Eels..... "	0 06	198,036	11,882 16	114,360	6,861 60
Herring..... Brls.	4 50	385	1,540 00	240	1,080 00
Sturgeon..... "	0 06	14,800	888 00	8,800	528 00
Sardines..... "	3 00	470	1,410 00	375	1,125 00
Salmon..... Lbs.	0 20	65,672	13,134 40	69,030	13,806 00
Trout..... "	0 10	128,675	12,867 50	98,000	9,800 00
Pickarel..... "	0 05	72,772	4,366 32	59,268	2,963 40
Pike..... "	0 05	25,000	1,250 00	24,000	1,200 00
Whitefish..... "	0 08	87,868	7,029 44	38,672	3,093 76
Winninich..... "	0 06	100,000	6,000 00	100,000	6,000 00
Coarse and mixed fish..... Brls.	3 00	802	2,406 00	780	2,340 00
Fish as manure..... "	0 50	16,110	8,055 00	10,900	4,450 00
Porpoise skins..... No.	4 00	156	624 00	280	1,120 00
do oils..... Galls.	0 40	8,280	3,312 00	16,800	6,721 00
Total value of the fisheries.....			75,022 82		62,130 84
Decrease.....					12,891 98

## COMPARATIVE RECAPITULATION

Of the Quantity and Value of the different Fisheries, from Quebec to Upper Ottawa, in 1890 and 1891.

Kinds of Fish.	Prices.	1890.		1891.	
		Quantity.	Value.	Quantity.	Value.
	\$ cts.		\$ cts.		\$ cts.
Shad.....	Lbs. 0 06	76,805	4,608 30	34,790	2,087 40
Eels.....	" 0 06	675,800	40,548 00	396,080	23,764 80
Sturgeon.....	" 0 06	257,800	15,468 00	194,350	11,661 00
Trout.....	" 0 10	252,000	25,200 00	297,350	29,735 00
Whitefish.....	" 0 08	36,800	2,944 00	37,320	2,985 60
Maskinongé.....	" 0 06	118,440	7,106 40	87,535	5,252 10
Bass.....	" 0 06	105,300	6,318 00	114,370	6,862 20
Pickarel.....	" 0 05	195,660	11,739 60	186,630	9,331 50
Pike.....	" 0 05	285,200	14,260 00	260,710	13,035 50
Mixed fish.....	" 0 03	1,526,500	45,795 00	1,267,100	38,013 00
Tom cod.....	Bush. 0 50	50,000	25,000 00	15,000	7,500 00
Total value of the fisheries.....			198,987 30		150,228 10
Decrease.....					48,759 20

## RECAPITULATION.

YIELD and Value of the Fisheries of the Province of Quebec (*exclusive of the Gulf Division*) for 1891.

Kinds of Fish.	Quantity.	Value.
		\$ cts.
Shad.....	Lbs. 56,441	3,386 46
Eels.....	" 789,701	47,382 06
Herring.....	Brls. 22,370	100,665 00
Sturgeon.....	Lbs. 269,001	16,140 06
Sardines.....	Brls. 7,223	21,669 00
Trout.....	Lbs. 427,350	42,735 00
Salmon.....	" 107,640	21,528 00
Pickarel.....	" 251,601	12,580 05
Pike.....	" 284,710	14,235 50
Whitefish.....	" 115,562	9,244 96
Maskinongé.....	" 87,535	5,252 10
Bass.....	" 114,370	6,862 20
Tom cod.....	Bush. 15,000	7,500 00
Winninish.....	Lbs. 100,000	6,000 00
Mixed fish.....	Brls. 16,597	68,799 00
Fish as manure.....	" 18,936	9,468 00
Porpoise skins.....	No. 221	884 00
do oils.....	Galls. 9,120	3,648 00
Total in 1891.....		397,979 39
do 1890.....		440,170 80
Decrease.....		42,291 41



## GENERAL RECAPITULATION.

YIELD and Value of the Fisheries in the whole Province of Quebec for 1891.

Kinds of Fish.		Quantity.	Value.
			\$ cts.
Cod....	Cwt.	201,622	907,299 00
Herring, pickled.....	Brls.	31,637	142,366 50
do smoked.....	Bxs.	1,320	330 00
Mackerel.....	Brls.	4,518	63,252 00
Haddock.....	Cwt.	1,923	6,730 50
Halibut.....	Lbs.	80,781	8,078 10
Salmon.....	Brls.	488	7,808 00
do do do.....	Lbs.	633,717	126,743 40
Shad.....	"	56,441	3,386 46
Eels.....	"	789,701	47,382 06
do do do.....	Brls.	49	490 00
Sardines.....	"	7,223	21,669 00
Smelts.....	Lbs.	79,028	3,951 40
Sturgeon.....	"	269,001	16,140 06
Trout.....	Brls.	85	850 00
do do do.....	Lbs.	427,350	42,735 00
Winninish.....	"	100,000	6,000 00
Whitefish.....	"	115,562	9,244 96
Maskinongé.....	"	87,535	5,252 10
Bass.....	"	114,370	6,862 20
Pickarel.....	"	251,601	12,580 05
Pike.....	"	284,710	14,235 50
Tom cod.....	Bush.	15,000	7,500 00
Cod tongues and sounds.....	Brls.	219	2,190 00
Lobsters.....	Cans	960,995	134,539 30
Coarse and mixed fish.....	Brls.	16,597	68,799 00
Seal skins.....	No.	20,787	25,983 75
Porpoise skins.....	"	221	884 00
Fish oil.....	Galls.	243,876	97,550 40
do as bait.....	Brls.	44,628	66,942 00
do as manure.....	"	112,120	56,060 00
do for local use not included.....	"	22,688	90,752 00
Total for 1891.....			2,004,586 74
do 1890.....			1,615,119 76
Increase.....			389,466 98

STATEMENT of the Number and Value of Boats, Nets and other Fishing Material employed in the **Province of Quebec** (exclusive of the Gulf Division).

Articles.	Value.
	\$
1,004 Boats.....	12,636
38,790 Fathoms of nets.....	10,565
7,550 do seines.....	3,841
480 Brush weirs.....	31,598
674 Eel weirs.....	33,750
Total.....	92,390

NOTE.—The number of men engaged fishing is given at 2,395, but they cannot be considered as regular fishermen, as most of them only fish during a short period of the year.

STATEMENT of Vessels and Boats and Fishing Material employed in the whole **Province of Quebec, 1891.**

Articles.	Value.
	\$
54 Vessels of 1,901 tons.....	47,600
6,429 Boats and flats.....	173,068
238,012 Fathoms of nets.....	128,882
30,811 do seines.....	30,116
1,154 Brush and eel weirs.....	65,348
25 Trap nets.....	5,960
46 Lobster canneries and plant.....	31,825
47,170 do traps, &c.....	49,551
Total.....	532,350

STATEMENT of Men employed in the Fisheries of Quebec for 1891.

Sailors in Gulf division.....	394
Fishermen and shoremen in Gulf division.....	9,347
do Inland divisions.....	2,395
Total.....	12,136

## APPENDIX E.

## MANITOBA AND NORTH-WEST TERRITORIES.

ANNUAL REPORT OF INSPECTOR ALEXANDER McQUEEN ON THE  
FISHERIES OF MANITOBA, FOR THE YEAR 1891.

WINNIPEG, 31st December, 1891.

Hon. CHARLES H. TUPPER,

Minister of Marine and Fisheries, Ottawa.

SIR,—I have the honour to submit my eighth annual report on the fisheries of the Province of Manitoba for the year ending 31st of December, 1891. At the outset, I may state that my former inspectorate has been changed, the supervision of the North-West Territories having been assigned to a new officer. This year, with a view to systematize the work, I subdivided the territory under my jurisdiction into thirteen fishery districts, so that overseers and guardians might have the areas within which they are to work clearly defined. It gives me pleasure to report that fish of all kinds, including whitefish, were abundant this year. In the southern part of Lake Winnipeg, where fears of depletion were entertained, large quantities of whitefish were caught, both by Indians and Icelanders. The commercial traders, too, were exceedingly fortunate this year in catching, in less time and under restricted regulations, as large a quantity as in any previous year.

## THE NEW REGULATIONS.

The new regulations as to summer fishing, promulgated on the 8th of June last, went into operation, and were strictly observed by commercial fishermen, who took out licenses under them. Towards the close of the season two of the companies suffered considerably in the loss of nets, through storms, which are so frequent on Lake Winnipeg. They attribute this to having been excluded from the usual places of shelter. Owing to pound nets having been prohibited under the new regulations, there was no sturgeon fishing by the companies during the past year. Apart from the three trading companies, only one other commercial license was issued during the season, to a trader who used one sail boat and 1,500 fathoms of gill net. Considerable misunderstanding arose upon the issue of the new regulations as to the intent of "domestic licenses." An idea was entertained that these licenses were intended for home use only, and that settlers taking out such licenses would be precluded from selling their surplus catch; but now that it has been ascertained that such licenses entitle the holders to commercial privileges, they are meeting with more favourable acceptance. Commercial fishermen complain, however, at being deprived of places of shelter during the stormy period of September, when they are exposed to severe storms on Lake Winnipeg.

## THE CATCH FOR 1891.

It is satisfactory to find, notwithstanding the fears entertained as to depletion, that fish were exceedingly plentiful during the past year in the waters of Manitoba. Near the mouth of the Red River, a party of St. Peters Indians caught in two weeks last autumn 40,000 pounds of whitefish, a catch said to have been unprecedented in that section for at least thirty years. The total catch for the year, including that for home consumption, amounted to 6,612,391 pounds, valued at \$246,184. It must be borne in mind that this amount does not include, as formerly, the catch in the North-West Territories.



## THE MANITOBA SUPERINTENDENCY.

The North-West Territories having been separated from Manitoba, and placed under the direction of Inspector Gilchrist, I have had a map prepared of the Manitoba Superintendency, and subdivided into Fishery Districts, that overseers and all interested in the fisheries may know the exact location of the different subdivisions. Subjoined will be found a description of the various districts, with their metes and bounds.

## NO. 1 DISTRICT.—AREA ABOUT 7,500 SQUARE MILES.

This district lies in the south-west portion of the province, and its boundaries are as follows:—

*West.*—Western boundary of province from international boundary, northerly to the 50th parallel, north latitude.

*North.*—50th parallel of latitude, from western boundary of province, easterly to the 99th meridian line.

*East.*—99th meridian line, from the 50th parallel, southerly to the international boundary.

*South.*—The international boundary line, from the 99th meridian line, westerly to the western boundary of the province.

This district is not of much importance to the trade, the catch being principally for home consumption

The varieties of fish caught are : pickerel, pike, gold-eyes and suckers.

## NO. 2. DISTRICT.—AREA ABOUT 5,000 SQUARE MILES.

This district lies east of district No. 1, and is bounded as follows:—

*West.*—99th meridian line, from the international boundary, northerly to the 50th parallel of latitude.

*North.*—50th parallel of latitude, from the 99th meridian line, easterly to the first principal meridian line.

*East.*—The first principal meridian line, from the 50th parallel, southerly to the international boundary.

*South.*—The international boundary line, from the 1st principal meridian, westerly to the 99th meridian line.

There is no fishing in this district for market, all caught being used for home consumption.

The varieties are : pickerel, pike, catfish, suckers, gold-eyes and an occasional sturgeon.

## NO. 3 DISTRICT.—AREA ABOUT 6,500 SQUARE MILES.

This district is in the south-east portion of the province from Winnipeg, and is bounded as follows:—

*West.*—The 1st principal meridian, from the international boundary, northerly to the 50th parallel of latitude.

*North.*—The 50th parallel of latitude, from the 1st principal meridian to the eastern boundary of the province.

*East.*—The eastern boundary of the province, from the 50th parallel of latitude southerly to the international boundary.

*South.*—The international boundary line, from the eastern boundary of the province, westerly to the 1st principal meridian.

In this district the catch consists of whitefish, pickerel, sturgeon, pike, sheeps-head, gold-eyes, catfish, buffalo fish, perch, suckers and tullibees. The catch for the trade is small and altogether for the local market.

## NO. 4 DISTRICT.—AREA ABOUT 6,500 SQUARE MILES.

This district comprises the south end of Lake Winnipeg, and is bounded as follows:—

*West.*—The 1st principal meridian, from the 50th parallel of latitude, northerly to the 51st parallel.

*North.*—The 51st parallel of latitude, from the 1st principal meridian, easterly to the eastern boundary of the province.

*East.*—The eastern boundary of the province, from the 51st parallel of latitude, southerly to the 50th parallel.

*South.*—The 50th parallel of latitude, from the eastern boundary of the province, westerly to the 1st principal meridian.

In this district fishing is carried on principally in winter and by settlers, who in addition to fishing for their own use, also sell to the trade. The varieties are the same as in No. 3 district.

## NO. 5 DISTRICT.—AREA ABOUT 5,000 SQUARE MILES.

This district comprises the southern portion of Lake Manitoba, and is bounded as follows:—

*West.*—The 99th meridian line, from the 50th parallel of latitude, northerly to the 51st parallel.

*North.*—51st parallel of latitude, from the 99th meridian line, easterly to the 1st principal meridian.

*East.*—The 1st principal meridian line, from the 51st parallel of latitude, southerly to the 50th parallel.

*South.*—The 50th parallel of latitude, from the 1st principal meridian, westerly to the 99th meridian line.

Fishing for the trade is carried on entirely in winter and by settlers only. The varieties are: whitefish, pickerel, pike and suckers, &c.

## NO. 6 DISTRICT.—AREA ABOUT 7,000 SQUARE MILES.

This district lies to the west of No. 5, and is bounded as follows:—

*West.*—The western boundary of the province, from the 50th parallel of latitude, northerly to the 51st parallel.

*North.*—The 51st parallel of latitude, from the western boundary of the province, easterly to the 99th meridian line.

*East.*—The 99th meridian line, from the 51st parallel of latitude, southerly to the 50th parallel.

*South.*—The 50th parallel of latitude, from the 99th meridian line, westerly to the western boundary of the province.

There is no fishing for commercial purposes carried on in this district. The varieties are: pickerel, pike and suckers.

## NO. 7 DISTRICT.—AREA ABOUT 7,000 SQUARE MILES.

This district lies in the vicinity of Lake Dauphin, and is bounded as follows:—

*West.*—The western boundary of the province, from the 51st parallel of latitude, northerly to the 52nd parallel.

*North.*—The 52nd parallel of latitude, from the western boundary of the province, easterly to the 99th meridian line.

*East.*—The 99th meridian line, from the 52nd parallel of latitude, southerly to the 51st parallel.

*South.*—The 51st parallel of latitude, from the 99th meridian line, westerly to the western boundary of the province.

Settlers fish here during the winter for the trade. It is becoming a most important station for the development of the fisheries in Lake Winnipegosis.

The varieties comprise whitefish, pickerel, pike, gold-eyes and suckers.

## NO. 8. DISTRICT.—AREA ABOUT 5,000 SQUARE MILES.

This district, known as the Fairford district, on Lake Manitoba, is bounded as follows:—

*West.*—The 99th meridian line, from the 51st parallel of latitude, northerly to the 52nd parallel.

*North.*—The 52nd parallel of latitude, from the 99th meridian line, easterly to the 1st principal meridian.

*East.*—The 1st principal meridian line, from the 52nd parallel of latitude, southerly to the 51st parallel.

*South.*—The 51st parallel of latitude, from the 1st principal meridian to the 99th meridian line.

This is an important district for domestic fishing. Indians and settlers sell a considerable quantity of fish in winter.

The varieties here comprise whitefish, pickerel, trout, sturgeon, pike, tullibees, catfish, gold-eyes, sheephead, buffalo, perch and suckers.

## NO. 9 DISTRICT.—AREA ABOUT 7,000 SQUARE MILES.

This district, known as the Narrows of Lake Winnipeg, is bounded as follows:—

*West.*—The first principal meridian, from the 51st parallel of latitude, northerly to the 52nd parallel.

*North.*—The 52nd parallel of latitude, from the 1st principal meridian, easterly to the eastern boundary of the province.

*East.*—The eastern boundary of the province, from the 52nd parallel of latitude, southerly to the 51st parallel.

*South.*—The 51st parallel of latitude, from the eastern boundary of the province, westerly to the 1st principal meridian.

The fishing in this district for the trade is carried on principally in winter. The varieties caught are the same as in district No. 8.

## NO. 10 DISTRICT.—AREA ABOUT 10,850 SQUARE MILES.

This district, the most important in the province, lies to the north of the Narrows of Lake Winnipeg, and is bounded as follows:—

*West.*—The 99th meridian line from the 52nd parallel of latitude, northerly to the northern boundary of the province.

*North.*—The northern boundary of the province, from the 99th meridian line, easterly to the eastern boundary of the province.

*East.*—The eastern boundary of the province, from the northern boundary of Manitoba, southerly to the 52nd parallel of latitude.

*South.*—The 52nd parallel latitude, from the eastern boundary of the province, westerly to the 99th meridian line.

The three fishing companies and one small trader are the only licensed traders who fish in the summer in this district.

The varieties caught are the same as those enumerated in district No. 8.

## NO. 11 DISTRICT.—AREA ABOUT 7,800 SQUARE MILES.

This district lies in the north-west corner of the province, and is bounded as follows:—

*West.*—The western boundary of the province, from the 52nd parallel of latitude, northerly to the northern boundary of the province.

*North.*—The northern boundary of the province, from the western boundary thereof, easterly to the 99th meridian line.

*East.*—The 99th meridian line, from the northern boundary of the province, southerly to the 52nd parallel of latitude.

*South.*—The 52nd parallel of latitude, from the 99th meridian line, westerly to the western boundary of the province.



There are no fishing stations as yet in this district, if we except some fishing by Indians and half-breeds at Duck and Dawson Bays. The catch here is for home consumption.

NO. 12 DISTRICT.—AREA ABOUT 7,000 SQUARE MILES.

This district lies immediately to the north of the north-west part of the province, in the district of Saskatchewan, and is bounded as follows:—

*West.*—A line in continuation of the western boundary of Manitoba, northerly to the 54th parallel of latitude.

*North.*—The 54th parallel of latitude, from said continued line, easterly to the 99th meridian line.

*East.*—The 99th meridian line, from the 54th parallel of latitude, southerly to the northern boundary of Manitoba.

*South.*—The northern boundary of the province, from the 99th meridian line, westerly to western boundary of Manitoba.

Fishing for commercial purposes has been carried on for the last two years by the trading companies already referred to. They operate at Selkirk Island for about six weeks in autumn. The varieties of fish here are the same as those enumerated in district No. 8.

NO. 13 DISTRICT.—AREA ABOUT 14,000 SQUARE MILES.

This district lies immediately to the north of the north-east portion of the Province of Manitoba, in the district of Keewatin, and is bounded as follows:—

*West.*—The 99th meridian line, from the northern boundary of Manitoba, northerly to the 54th parallel of latitude.

*North.*—The 54th parallel of latitude, from the 99th meridian line easterly to the 95th meridian line.

*East.*—The 95th meridian line, from the 54th parallel of latitude, southerly to the northern boundary of Manitoba.

*South.*—The northern boundary of Manitoba, from the 95th meridian line, westerly to the 99th meridian line.

No commercial fishing yet developed in this district. The varieties of fish are the same as in district No. 8.

COMMERCIAL FISHING.

This kind of fishing is restricted to Lake Winnipeg, and is carried on only in summer, extending from the 1st of June to the 5th of October, the date of the commencement of the close season for whitefish, trout and tullibee. There were only four commercial licenses issued during the past year. Those taking out licenses were: The Manitoba Fish Co., the Selkirk Fish Co., Wm. Robinson & Co., and Stephen Raymond. The summer fishing for whitefish was better than it has been known for years in Lake Winnipeg. Operations were carried on within the newly prescribed limits.

THE MANITOBA FISH COMPANY.

This firm operated at Berens, Reindeer and Selkirk Islands in Lake Winnipeg, used 25,000 fathoms of gill net, and caught 1,223,550 lbs. of all kinds of fish. Of this quantity nearly all was exported to Ontario and the United States.

Subjoined is a list of the tugs, vessels and boats, together with the number of men employed by this firm during the past season:—

	Men.	Value.
Steamer "Glendevon".....	7	\$ 8,000
do "Miles".....	4	6,000
do "Angler".....	6	3,000
do "Hazel".....	5	2,000
Barge "Berens River".....	3	5,000
do "New Brunswick".....	2	3,000
13 sail boats.....	39	3,900
25,000 fathoms gill net.....	...	3,360
Freezers, ice-houses and other plant on shore.....	...	16,000
	<u>66</u>	<u>\$50,260</u>

In addition to the above, the firm employed 35 men on shore attending to the curing and handling of fish. The firm paid out in wages to men, inclusive of board, about \$20,000 during the season.

Their catch for the season was as follows:—

	Lbs.	Value.
Whitefish.....	1,099,530	\$60,475
Pickarel.....	107,440	3,225
Pike.....	16,560	232
	<u>1,223,530</u>	<u>\$63,932</u>

#### WM. ROBINSON & CO.

This firm operated at the same stations as the Manitoba Fish Co. They used 14,850 fathoms of gill net and caught 797,305 lbs. of all kinds of fish. Their catch was marketed in the United States.

The firm had the following tugs, vessels and boats employed during the season:—

		Value.
Steamer "Ogema," 4 men.....		\$ 6,000
do "Lady Ellen," 3 men.....		1,500
do "Colville," 6 do.....		8,000
Barge "North Star," 2 do.....		9,000
7 sail boats, 14 do.....		1,800
14,850 yds. gill net.....		2,800
Freezers, ice-houses, &c.....		14,000
	<u>29 men.</u>	<u>\$43,100</u>

The firm employed, besides the above, 26 men on shore in connection with their freezers and curing of fish. Their catch was as follows:—

	Lbs.	Value.
Whitefish.....	754,799	\$41,500
Pickarel.....	41,417	1,242
Pike.....	1,089	28
	<u>797,305</u>	<u>\$42,770</u>

#### SELKIRK FISH CO.

This company operated at Selkirk Island on Lake Winnipeg. They used 5,000 fathoms of gill net, valued at \$900; caught 396,000 lbs. of whitefish and 40,000 lbs. of pickarel, aggregating in value, \$22,950. The catch was principally marketed in the United States. The firm had one small tug, one steam barge and four sail boats in use, valued at \$16,000. Their freezers, ice-house and other plant ashore are valued at \$6,000. They employed 20 men.

## STEPHEN RAYMOND.

Mr. Raymond took out a commercial license for 1,500 fathoms of gill net and operated at Berlen's Island. He used only one sail boat valued at \$150, and employed one man. His catch was altogether whitefish and amounted to 12,875 lbs., valued at \$386.25. His entire catch was sold in Winnipeg.

## FISHERY GUARDIANS.

I herewith submit a synopsis of the reports of the different guardians. The men throughout have been diligent in the discharge of their duties. The work of guardians on Lakes Winnipeg and Manitoba is not only arduous, but attended with considerable hardships when cruising in canoes or small boats in stormy weather; or driving with dog trains in winter during severe weather. The appointment of guardians from Indian or other departments, without compensation, has not been a success. They have other duties to perform and take no interest in fishery matters. Indian and fishery interests, too, often clash, and I think it would be better if others than employés of the Indian Department, should have charge of the fisheries.

## ST. LAURENT, LAKE MANITOBA.

*Guardian D. Devlin* who has charge of the fishing stations at the southern end of Lake Manitoba, with headquarters at the village of St. Laurent, reports fish of all kinds plentiful during the past year. The catch, however, owing to the uncertainty attending the issue of licenses, pending the putting in force of the new regulations, was smaller than the previous year. This officer visited, during the close season, all stations between St. Laurent and Totogan on the south, and St. Laurent and Long Point on the east of the lake, and found in every instance the regulations as to the spawning period strictly observed. No nets were set between the 5th of October and the 30th November, for whitefish. He reports the sale of fish for commercial purposes in his district as follows:—

	Lbs.	Value.
Whitefish .....	36,870	\$1,474 80
Pickarel .....	75,000	2,250 00
Pike .....	125,000	1,562 50
Tullibee .....	10,000	200 00
	<u>246,870</u>	<u>\$5,487 30</u>

In addition to the above he reports used for home consumption:—

	Lbs.	Value.
Whitefish .....	20,000	\$800 00
Pickarel .....	10,000	300 00
Pike .....	10,000	100 00
Mixed fish .....	20,000	200 00
	<u>60,000</u>	<u>\$1,400 00</u>

This makes a grand total of all kinds of fish, 306,870 lbs., valued at \$6,887.30. He estimates the number of persons fishing for all kinds of fish, at eighty-five. The decrease from the previous year he attributes to the fact, that men found other employment such as hunting and working in farm district, on account of the abundant harvest. The traders who purchased fish from fishermen on Lake Manitoba, during the past year, were: Messrs. A. G. Hepworth, Blackwood Bros., J. McKenny, D. Amit, Philion & Co., H. Armstrong, Richard Bros., and Joseph Hamlin. Seven thousand fathoms of gill net of six inches extension measure were used in fishing for whitefish, valued at \$1,200.



*Guardian Fraser*, who has the supervision of Shoal Lake, east of St. Laurent, reports sixteen fishermen with 450 fathoms of net, catching 107,200 lbs. of pike for home consumption.

#### THE NARROWS—LAKE MANITOBA.

*Guardian H. Martineau* reports that the close season was well observed at the fishing stations in the vicinity of the Narrows of Lake Manitoba. Fishing operations for the trade are chiefly carried on in winter, as settlers only fish for their own use during the rest of the year. They are unable to fish during summer for the trade, on account of the expense it would entail to fit out boats, tugs, and freezers, as is done by large traders on Lake Winnipeg.

He reports the sale of fish to the trade in his district as follows:—

	Lbs.	Value.
Whitefish.....	89,850	\$2,690 50
Pickrel.....	22,175	443 50
Pike.....	89,650	449 25
Tullibee.....	140	3 20
Gold-eyes.....	16,820	168 20
	<u>218,635</u>	<u>\$3,754 65</u>

In addition to the above, he reports used for home consumption, mixed fish of all kinds, 111,290 lbs., valued at \$2,225.80. He further states that owing to the alteration in the fishery regulations, and their not coming to hand until too late fishermen were undecided what to do; although the prospects for a good season were good. He reports fish of all kinds very abundant. They have not been so numerous for years as they were last fall, which goes to show that the lakes are far from being depleted. Strange to say, however, since the advent of the recent severe weather, scarcely any have been taken, the fish having, no doubt, sought the warmer temperature of deep water.

In his estimate of the catch for home consumption, he gives it as nearly correct as possible, for the Indians as a rule are averse to the license system and refuse to give anything like a correct return of their catch for the year.

#### FAIRFORD, LAKE MANITOBA.

*Guardian Wm. Archer*, who has the supervision of the fishery stations at Fairford, Lake St. Martin and Little Saskatchewan River, reports the observance of the fishery regulations satisfactory this year. Although there has been lower water in the Little Saskatchewan River than in former years, whitefish have been more abundant there than for years past. The closing of Sturgeon Bay, at the mouth of the Little Saskatchewan River, to commercial fishing, and with a prospect of higher water in the river itself, in future whitefish will no doubt be as numerous as in former years. He reports it difficult to obtain a correct statement of the catch of fish in the district. The estimated catch of all kinds of fish for the past year, for all purposes, amounted to 632,400 lbs., as follow:—

	Lbs.	Value.
Whitefish.....	223,000	\$4,460 00
Pickrel.....	32,300	323 00
Pike.....	21,080	310 80
Mixed fish.....	346,020	3,460 20
	<u>632,400</u>	<u>8,554 00</u>

The whole of the catch was used for home consumption, except 50,000 lbs. of whitefish and 3,000 lbs. pickrel, which were sold to the trade.

Fish is the chief food used by Indians and half breeds in this district, during the summer and winter. Many families live almost entirely upon fish for weeks at a time. There are some 92 Indian and half-breed families in this district. Each family uses eight fish per day, which would make the estimated catch for all purposes, as given above. He suggests that some provision be made for those half-breeds, who have recently quitted treaty. They might be allowed like Indians, to catch fish for their own use, during the close season. If not allowed this privilege they will suffer, as they have no other means of subsistence. The men being frequently away from home, have no one behind to provide for their wives and families.

WATER HEN RIVER—LAKE WINNIPEGOSIS.

*Guardian J. H. Adams*, who has the supervision of the fishing stations in the southern portion of Lake Winnipegosis and Lake Dauphin, reports the fisheries gradually developing in this district, with the advance of settlement. The bulk of the fishing is done by Indians, who form the greater portion of the population. The close season was well observed by whitemen, half-breeds and Indians. A few of the latter were permitted to fish during the spawning season, as they were dependent on fish for food, for the maintenance of their families.

He reports the catch for the year as follows:—

	Lbs.	Value.
Whitefish .....	305,000	\$ 6,100 00
Pickerele.....	53,000	530 00
Pike.....	82,000	820 00
Mixed fish.....	445,000	4,450 00
	<u>885,000</u>	<u>\$11,900 00</u>

Of this quantity 150,000 lbs. of whitefish, 10,000 lbs. of pickerel, and 5,000 lbs. of pike were sold to the trade. The catch for the trade is all secured in the winter season.

The number of persons employed in fishing was 100, of whom 36 were licensed fishermen entitled to sell to the trade. The number of small skiffs and canoes used by fishermen was 70; valued at \$700. The quantity of gill net used was 7,900 fathoms; valued at \$1,152.

GIMLI DISTRICT, LAKE WINNIPEG.

*Guardian Stefan Jonsson* reports fishing among the Icelanders good during the past year; the catch of whitefish being about 40 per cent larger than that of the previous year. He also reports the close season as having been strictly observed by fishermen at Big and Deer Islands, Gimli, and other stations. He visited Drake & Co's saw-mill at Black Island, and finding that some mill rubbish was being allowed to escape into the lake, cautioned the owners, who at once remedied the matter.

The catch in this district for the year was as follows:—

	Lbs.	Value.
Whitefish .....	81,986	\$2,459 58
Pickerele.....	58,520	1,170 00
Pike ....	21,900	219 00
Catfish.....	8,600	172 00
Tullibee.....	114,200	1,142 00
Mixed fish.....	179,600	1,796 00
	<u>464,806</u>	<u>\$8,102 58</u>

Of this quantity 81,986 lbs. of whitefish, 23,120 lbs. of pickerel, and 56,400 lbs. of tullibee were sold to the trade.

Selkirk is the principal market for the fish caught in this district. There were 116 men employed fishing during the year, of whom 54 were licensed fishermen. They used in all 13,386 fathoms of gill nets, valued at \$1,376, and about 100 boats were employed, valued at \$1,000.

#### FORT ALEXANDER, LAKE WINNIPEG.

*Guardian John Wood*, who has charge of the east side of Lake Winnipeg from Loon Straits to the mouth of the Red River, reports a considerable falling off in the catch of fish in his district during the past year. This he attributes partly to less gill nets being used, and commercial fishermen being debarred from using pound nets at Elk Island as in previous years.

He reports the catch for the season as follows:—

	Lbs.	Value.
Whitefish.....	268,000	\$8,040 00
Pickereel.....	115,050	2,301 00
Pike.....	78,790	787 90
Sturgeon.....	29,020	870 00
Tullibee.....	56,900	1,138 00
Mixed fish.....	140,182	1,482 82
	<u>687,942</u>	<u>\$14,619 72</u>

Of this quantity 61,725 lbs. of whitefish, 9,240 lbs. of pickerel and 13,225 lbs. of pike were sold to the trade, and marketed at Selkirk and Winnipeg. There were 128 men engaged fishing during the past year, using 128 boats and 8,575 fathoms of gill net. The value of boats is placed at \$1,102, and that of nets at \$1,084.

#### BEREN'S RIVER—LAKE WINNIPEG.

*The Guardian J. B. Johnston*, who supervises this important division of Lake Winnipeg, reports that commercial fishermen fully complied with the new regulations as to summer fishing. Their operations during the past year, although working within restricted limits, were rewarded with great success, owing to whitefish being unusually abundant. Winter fishing was not as good as in previous years, owing to a scarcity of fish and less twine being used, as the Indians were otherwise employed. The fall fishing by Indians at Moosy Point, Flat Head and Pigeon Bay, compares favourably with that of previous years; but at Rabbit Point, Beaver Creek and other places further south, the catch was not so good as before. The catch in this district is given as follows, including commercial fishing:—

	Lbs.	Value.
Whitefish ...	1,541,800	\$46,254 00
Pickereel .....	141,619	2,832 28
Pike .....	27,074	270 74
Sturgeon.....	20,000	600 00
Mixed fish.....	105,000	1,050 00
	<u>1,835,493</u>	<u>\$51,007 02</u>

Of this quantity 220,000 lbs. of whitefish, 10,000 lbs. of pickerel, 20,000 lbs. of sturgeon, 10,000 lbs. of pike and 105,000 lbs. of mixed fish were used for home consumption; the rest was marketed by commercial traders.

The vessels and boats as well as nets used by the commercial companies having been given already, it only remains to give statistics of domestic fishing. In the latter, there were 56 men employed, using 18 boats, valued at \$180, and 7,240 fathoms of gill nets, valued at \$811.



## OTHER DISTRICTS.

Apart from the above divisions under the direct supervision of regular guardians there are several others, under the care of temporary guardians and myself, which are included as follows:—

At Selkirk Island in the north-west portion of Lake Winnipeg, not far from the mouth of the Big Saskatchewan River, three commercial companies operated. The Manitoba Fish Co., Wm. Robinson & Co. and the Selkirk Fish Co. The two former operated here for about two months, transferring their outfit from Beren's River district; but the latter confined their operations, during the entire season, to this locality. The catch here by all the companies was as follows:—

	Lbs.	Value.
Whitefish.....	991,529	\$ 29,745 87
Pickrel.....	67,241	1,344 82
Pike.....	575	5 75
	<u>1,059,345</u>	<u>\$ 31,096 44</u>

The Selkirk Fish Company operated one tug, value \$3,000, four sail boats, value \$1,000, 5,000 fathoms of gill net, value \$900. The other companies used the same plant as that used when at Beren's River District.

The Red River District shows an increase in the catch over the previous year, as follows:—

	Lbs.	Value.
Whitefish.....	3,200	\$ 160 00
Pickrel.....	22,850	571 75
Pike.....	28,150	577 00
Mixed fish.....	136,100	1,361 00
	<u>190,300</u>	<u>\$2,669 75</u>

Of this quantity 118,200 lbs. were sold to the trade in Winnipeg and Selkirk.

In the Rock Lake District, which was under the direction of Guardian W. J. Cooper, now left the limits, the catch was about the same as last year. Rock, Pelican and Swan Lakes are a great convenience to the settlers in their vicinity, particularly the crofters, who are fond of fishing. The only kinds of fish caught there are pike and suckers. When the hatchery is established and in operation, these lakes might be stocked with more edible fishes. A few loads of fish were marketed from here to Brandon and other rural towns. Fishing is done by hook and line. Subjoined is an estimate of the catch:—

	Lbs.	Value.
Pike.....	105,000	\$ 1,725
Suckers.....	8,000	80
	<u>113,000</u>	<u>\$ 1,805</u>

The Pilot Mound *Sentinel*, in speaking of the fisheries of this locality, says: "A few years ago, Rock Lake, Swan Lake and Pelican Lake, as well as Pembina River, that connected the expansion, teemed with fish, mostly suckers and pike with a few pickrel. There are now very few fish when compared with the millions that then inhabited those waters. Independent of the very agreeable food supply that can be procured from well stocked rivers, every person has a fondness for fishing. A fine day, a good rod and line and a well stocked river, will make any one happy for a time, but angling in the Pembina River and Pembina Lakes is not so good as it once was. During the last few years the rainfall has decreased to such an extent that the rivers are now much lower than formerly, consequently both lakes and rivers have been reduced in size, as well as in depth, and the ice in winter not only

has further lessened the water supply, but it has also reduced the quantity of air contained in the water. Without oxygen fish cannot live. During the winter of 1887, some of the spring creeks flowing into the Pembina were absolutely choked up with fish, and in many cases settlers and others took away sleigh loads for sale, or fed hogs with fish. When a hole was cut in the ice on the river, the fish attracted by the light and the prospect of getting air, would struggle into the opening. A large spring on the farm of Mr. A. E. Esplin has ever been a favourable resort for pike in the winter season, and the inhabitants of the district around have hooked out thousands from the opening that never freezes."

## CONCLUSION.

The fishing trade in Manitoba is growing steadily in importance and if not hampered too much by unnecessary restrictions, promises to develop into one of the leading industries of the province. Our water area is large and abounds with fish of various kinds, and with a strict enforcement of the close season and the assistance of the proposed hatchery, the apprehended danger of depletion will be entirely removed. Lake Winnipegosis has only been partially tested as yet, but promises to be one of the most prolific sources of supply for whitefish. It is safe to predict that there will be ample fish, to not only supply the home market, but leave a large margin for commercial purposes with the adjoining States to the south, where our fish are in great demand. The trade is now affording employment to a large number of people in winter, who otherwise would probably be idle, and Indians as well as settlers in the vicinity of our great lakes find fish enough for food, and some to spare, to trade in exchange for other provisions. There are 5 steam tugs and some 26 regular fishing boats used in fishing in Lake Winnipeg in connection with commercial fishing. This does not include 478 smaller boats and canoes used in all our waters by Indians and settlers fishing for home use. The fishing industry too has led to the establishment of a transport service for carrying fish to market that necessitates the use of steamers and the employment of a good number of men. Taking it altogether it is safe to say that fishing will in a few years be second only to farming in Manitoba and the great North-west Territories.

I have the honour to be, Sir,

Your obedient servant,

ALEXANDER McQUEEN,  
*Inspector of Fisheries for Manitoba.*

## RECAPITULATION.

	Lbs.	Value.
Whitefish.....	3,561,235	\$ 195,867 92
Pickereel.....	597,755	14,943 87
Pike.....	706,529	14,130 58
Sturgeon.....	49,020	2,451 00
Tullibee.....	181,240	3,624 80
Mixed fish.....	1,516,612	15,166 12
Totals.....	<u>6,612,391</u>	<u>\$ 246,184 29</u>

Return of the Number and Value of Vessels, Boats and Fishing Materials, the Number of Men employed, with the Kinds and Quantities of Fish, &c., in the Province of Manitoba.

DISTRICT.	VESSELS AND BOATS EMPLOYED.				FISHING MATERIAL.				KINDS OF FISH.						VALUE.	
	Vessels or Tugs.		Boats.		Gill Nets.		Seines.	Whitefish, lbs.	Pickrel or Dore, lbs.	Pike, lbs.	Sturgeon, lbs.	Tullibee, lbs.	Mixed Fish, lbs.			
	No.	Tonnage.	Value.	Men.	No.	Value.								Men.		Value.
St. Laurent	...	...	...	85	7,000	1,200	...	56,870	58,000	135,000	...	10,000	20,000	8,352 85		
Shoal Lake.	...	...	...	16	450	90	...	89,850	22,175	107,200	...	...	...	2,144 00		
Narrows, Lake Manitoba.	...	...	...	41	472	695	...	223,000	32,300	89,650	...	140	128,110	8,573 02		
Fairford	...	...	...	92	552	92	...	305,000	53,000	82,000	...	...	346,020	17,154 30		
Water Hen River.	...	...	...	70	700	1,152	...	81,986	58,520	21,900	...	...	445,000	24,190 00		
Gimli, Lake Winnipeg.	...	...	...	100	1,000	1,376	...	268,000	115,050	78,900	...	...	188,200	10,576 23		
Fort Alexander	...	...	...	128	1,102	1,084	...	1,541,800	141,619	27,074	...	...	140,182	23,185 07		
Berens River	4	65	16,000	26	47,000	9,571	...	991,529	67,241	28,150	20,000	...	105,000	90,930 96		
Selkirk Island	1	36	3,000	5	5,000	900	64	3,200	22,850	27,575	...	...	...	56,226 61		
Red River.	...	...	...	31	310	725	...	...	...	...	...	...	...	2,671 25		
Rock Lake.	...	...	...	...	...	...	...	...	...	105,000	...	...	8,000	2,180 00		
Totals.	5	101	19,000	31	102,161	14,593	64	3,561,235	597,755	706,529	49,020	181,240	1,516,612	246,184 29		



## NORTH-WEST TERRITORIES.

ANNUAL REPORT OF INSPECTOR F. C. GILCHRIST ON THE FISHERIES  
OF THE NORTH-WEST TERRITORIES, FOR THE YEAR 1891.

FORT QU'APPELLE, ASSINIBOIA, N.W.T.,

31st December, 1891.

Hon. CHARLES H. TUPPER,  
Minister of Marine and Fisheries,  
Ottawa.

SIR,—I have the honour to submit my annual report for the year ending 31st December, 1891.

I was put in charge of the fisheries of this district in May last, and since then have travelled over many miles of country. This report is a very incomplete one, and gives but a faint idea of the fisheries of the country. The vast extent and comparatively unsettled state of the Territories, the character of their waters, and the mode of carrying on the fishing, there being none of a commercial character, the fish being all utilized at home, and the unorganized state of the fisheries service, make it impossible for me to give an estimate of the catch, except for a portion of Assiniboia and a few lakes in the north.

In southern and central Alberta there are no lakes containing fish of the better kinds, except several small but very beautiful lakes in the Rocky Mountains, which contain whitefish and lake and other trout. Almost all the streams of this section converge into the south branch of the Saskatchewan River, and have in their upper parts several varieties of mountain and river trout, which afford unlimited and almost unequalled sport to the angler; the lower parts contain great numbers of pike (jackfish), gold-eyes, sturgeon, catfish, &c., but no figures of these or the fish of the upper waters could be obtained upon which to base an estimate of the total catch. The trout fishing of the Bow River, about which so much of a laudatory character has been written, is undoubtedly failing. The history of the trout in the Atlantic States of the Union and in Ontario goes to prove that it is the most difficult of all fish to protect and maintain in its original state of plenty, and it will be the same here, and none but the most energetic measures will help the trout of the Rockies to fight successfully the war of extermination at present being carried on against them.

In Northern Alberta, especially north of the north branch of the Saskatchewan River, are many fine lakes with a greater or less abundance of whitefish in them. Acting Fishery Overseer A. E. Johnston, of Edmonton, Alberta, reports that the regulations were fairly well observed, that, after the close season was over, he examined several whitefish and found very little spawn in them, and that, owing to the amount of work in connection with his regular duties as forest ranger, &c., he could find time to visit but three of the larger lakes in his district, and could not give any estimate of the catch in the other lakes, notably La Biche and Goldfish. His estimate is as follows:—

Lake Ste. Anne.....	20,000
White Whale Lake.....	40,000
Pigeon Lake.....	30,000
Total number of fish.....	90,000
Value of fish.....	\$6,400
Value of nets and boats.....	2,105
Total.....	\$8,505

The above are whitefish. He renders no estimate of the catch of pike, gold-eyes, &c.

Eastward from Alberta, to the north of the river, the country is studded with hundreds of lakes, nearly all of which are, or have been in the past, teeming with the very finest of whitefish and lake trout, besides pike, pickerel and other fish. In this section there is no agricultural settlement as yet, but there is a considerable population of Indians, half-breeds and Hudson Bay Company's people, who, to a very large extent, subsist upon the fish taken from its waters. Unfortunately the greater part of the fishing has always been done at the spawning time with the usual deplorable result, that many of the lakes that once furnished immense quantities of fish are now barren or nearly so. Still there yet remains a great wealth of fish, and now that the railways are beginning to tap it, this part of the Territories ought soon to be adding its quota to further the general welfare of the country.

The Prince Albert district has, north of the Saskatchewan River, many lakes ranging in size from a few acres to hundreds of square miles, nearly all of which are well stocked with fish, the most valued being whitefish and lake trout. This district has been under the supervision of Acting Fishery Overseer R. S. Cook, of Prince Albert, who gives an estimate of the whitefish caught by Hudson Bay Company's people, whites and half-breeds, in fourteen lakes as aggregating 964,000 lbs., and the Indian catch at 326,000 lbs., or a total of 1,290,000 lbs. I do not offer these figures as an estimate, but simply as an indication of the lacustrine wealth of the northern Saskatchewan. Up to the present, the fish have all been used for home consumption, but now that the railway has reached Prince Albert, a considerable trade should in the near future be done in exporting fish. The principal fish caught in the part of the district lying to the north of the river, much of which is heavily timbered, are whitefish, lake trout, pike, pickerel and sturgeon, the latter being taken as high as 200 lbs. in weight. South of the river, the country is open prairie, and has very few lakes, none of which contain the more valuable kinds of fish, but have great numbers of pike, pickerel, perch and suckers. In the river are pike, sturgeon, gold-eyes, &c., but very little is done to utilize them.

Assiniboia, the most populous of the Territories, is strictly a prairie country, and is not as well supplied with lakes containing fish as either Northern Alberta or Saskatchewan, but it has nevertheless considerable piscine wealth of its own. Over 100 miles of the Red Deer River and 500 miles of the South Saskatchewan run through the north-west portion of Assiniboia, but no fishing is done in either although they, and especially the Saskatchewan, contain immense numbers of pike, pickerel, sturgeon, gold-eyes and catfish.

The Qu'Appelle River, which is but a small stream, and the tributary lakes are the only waters in Assiniboia which are fished to any extent. The following is a synopsis of the report of Fishery Overseer John Foster, of Long Lake district: This season's fishing has opened very favourably, the quantity of whitefish taken being considerably greater than at the same time last year; the whitefish taken at the beginning of the year were very small but later in the season those caught were unusually large weighing from six to eight pounds each. This officer gives it as his opinion that the whitefish in Long Lake are spawning from 15th October to the end of the year. He gives the catch as follows:—

	Lbs.	Value.
Whitefish .....	10,000	\$ 500 00
Pickerel .....	6,000	180 00
Pike .....	13,000	390 00
Total.....	<u>29,000</u>	<u>\$1,070 00</u>

Total catch by the Indians was about 36,000 lbs.

Number of nets used, 100; value, \$400.

I would give the following as an approximate estimate of the catch of fish in other lakes in Assiniboia:—

Name of Lake.	Whitefish.	Tullibee.	Pike.	Pickerel.	Suckers, &c.
	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
Fishing Lake.....			5,000		
Lakes in White Sand River country.....			100,000		
Round Lake District.....		1,000	4,000	1,000	
Crooked do.....	1,000	4,000	6,000	1,000	3,000
Qu'Appelle Lakes.....	20,000	60,000	75,000	15,000	20,000
Eaglequill Lakes, S.S.W. Swift Current.....	10,000		15,000		
	31,000	65,000	205,000	17,000	23,000
Value..... \$	1,705 00	1,950 00	4,100 00	510 00	230 00
Total value. . . . .					\$ 8,495 00

	Lbs.	Value.
Total catch for above mentioned lakes in Assiniboia .....	370,000	\$ 9,565 00
do do Indian catch...	326,000	6,520 00
Total .....	696,000	\$16,085 00

The regulations were well observed in the Qu'Appelle district, no infractions coming to my notice, but, with the exception of Long Lake, nothing has been done to protect the fisheries of the other waters in Assiniboia.

I trust that the new system of reorganization of the fisheries service in the North-west Territories, which you have had under consideration for some time, will very soon be completed, so as to enable your officers to take steps for an active campaign for the better protection of the valuable fisheries of this country.

I have the honour to be, Sir,

Your obedient servant,

F. C. GILCHRIST,

*Inspector of Fisheries for the North-west Territories.*

#### RECAPITULATION OF THE NORTH-WEST TERRITORIES.

	Lbs.	Value.
Whitefish .....	1,601,000	\$79,555 00
Tullibee.....	65,000	1,950 00
Pike .....	218,000	4,360 00
Pickerel .....	23,000	690 00
Suckers .....	23,000	230 00
Total.....	1,930,000	\$86,785 00

#### TOTAL RECAPITULATION OF MANITOBA AND THE NORTH-WEST TERRITORIES.

	Lbs.	Value.
Whitefish .....	5,162,235	\$275,422 92
Pickerel.....	620,755	15,633 87
Pike .....	924,529	18,490 58
Sturgeon.....	49,020	2,451 00
Tullibee.....	246,240	5,574 80
Mixed fish .....	1,539,612	15,396 12
Total.....	8,542,391	\$332,969 29



## APPENDIX F.

# BRITISH COLUMBIA.

ANNUAL REPORT ON THE FISHERIES OF BRITISH COLUMBIA FOR  
THE YEAR 1891, BY INSPECTOR JOHN McNAB.

NEW WESTMINSTER, B.C., 31st December, 1891.

Hon. CHARLES H. TUPPER,  
Minister of Marine and Fisheries,  
Ottawa.

SIR,—I have the honour to submit my annual report, on the fisheries of British Columbia, for the year 1891, with tabulated and comparative statements of yield and value as well as synopsis of the reports of local guardians.

The returns show a decrease in value as compared with last year, as follows:—

Total value, 1890.....	\$3,481,432 29
“ 1891.....	2,999,755 10

Decrease.....	<u>\$ 481,677 19</u>
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This decrease is due to a lighter pack of salmon on most all the rivers in the province and to a shrinkage in the value from 12 cents per can in 1890, to 10 cents, the present quotation. This alone accounts for \$30,161 of the deficiency.

The capital invested in the various branches of the fishery industry of British Columbia in 1891 exceeds that of 1890 by the large sum of \$168,241.

Capital invested, 1891.....	\$1,679,520
“ 1890.....	1,511,279

Increase.....	<u>\$ 168,241</u>
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This increase is accounted for by the erection of four new canneries on the Fraser, and by a large addition to the sealing fleet, consisting of 22 vessels with an aggregate of 1,336 tons.

The number of hands employed in connection with fishing and sealing, as compared with last season, is as follows:—

Season, 1891.....	8,666
“ 1890.....	8,223

Increase.....	<u>443</u>
---------------	------------

The pack of salmon, canned and salted in 1891, is less by 100,320 cases and 1,641 barrels than in 1890. This decrease is accounted for by the shrinkages of the Fraser River pack to the extent of 66,980 cases, and of the coast pack of 33,340 cases as compared with the previous year.

Notwithstanding the deficiency of the catch on the Fraser River as compared with that of 1890, it is nevertheless considered, by the most experienced fishermen, to have been an exceptionally good yield, taking into account the fact that it was what is known as a poor or off year, when, judging from their previous experience, only a very small run of salmon was to be expected.

Comparing, then, the catch of 1891 with that of the two last "off" years, viz., 1884 and 1888, the result is as follows:—

Total pack on the Fraser River, 1884.....	34,007 cases of 48 lbs.
“ “ “ 1888.....	76,616 “

Equal for the two corresponding years, to 5,309,904 lbs., against the pack of 1891 of 8,527,552 lbs., an increase of 3,217,648 lbs. for the latter season, over and above the pack of the two corresponding seasons combined.

The coast pack shows a falling off of 1,600,336 lbs. when compared with the catch of last season, which was exceptionally large; but as all accounts from the upper waters of the Skeena concur in representing the number of salmon which ascended that river as very large, I consider that the deficiency in the pack is due to a failure in catching the salmon, in the estuary of the river, rather than to any scarcity of fish.

The pack on the Naas River was very small, amounting only to 531,168 lbs. as compared with 1,185,600 lbs. in 1890. Between tide-water and the head waters of the Naas River, there are more than twenty Indian villages and fishing stations, and from what information I can gather, I am led to believe that very destructive methods of securing supplies of fish must be practised by the Indians. The creeks frequented by salmon are obstructed by dams and weirs, and the parent fish destroyed. The Indians on the Naas River are difficult to deal with as they adhere very tenaciously to what they consider their privileges. I beg to suggest that a suitable man be sent up the Naas River next summer to visit the spawning places and induce the Indians, if possible, to remove these obstructions, and refrain from disturbing the parent fish on their spawning places.

At Alert Bay, Smith and Gardner's Inlets, the pack was very small; neither of these places has a capacity for supplying more than one small fishery. I beg to suggest therefore that these and similar streams be leased for a term of years, subject to renewals, to desirable persons. Such lessees would find it much to their interest to erect small hatcheries and thoroughly protect the rivers; after four years they would be amply repaid for their outlay.

The Fraser hatchery has beyond doubt proved its ability to aid in a very material manner in preserving a large and regular supply of salmon in the river, and I would respectfully urge that another, with a capacity for at least 20,000,000 of eggs be erected at a suitable place on the Fraser, or on one of its tributaries, and that a portion of the ova operated on be that of the Quinnet salmon. A portion also might be collected from the earliest spawning fish of the Sâw-quai variety. The export of Fraser River salmon packed in ice and frozen, will in the near future assume immense proportions, and the earlier varieties of fish, suitable for that purpose, as well as for the supply of the yearly increasing local demand, should receive the attention which their increasing importance requires.

Before leaving the Fraser River fisheries, I wish to mention the fact, that a very fine full-grown shad containing well developed ova, was caught in the river in the latter part of July last, by one of Mr. Wadhams' fishermen, and sent to me by that gentleman. I am in a position, therefore, to vouch for the excellent quality of the first shad known to have been caught in the Fraser River.

The following schedule A shows the number of canneries in operation in British Columbia during the season of 1891, with a comparative statement of the packs of 1890 and 1891:—

## A.

## SCHEDULE of Salmon Canneries operated in British Columbia during the Season of 1891.

Owner or Manager.	Name of Cannery.	Year first Operated.	Cases, 48 Lbs.	Cases, 48 Lbs.	Number of Boats.	Number of Hands.	Pack, 1 lb. Cans.
<i>Fraser River.</i>			1891.	1890.			1891.
Bon Accord Fishing Co.	Bon Accord.....	1879	7,824	12,343	26	144	375,552
J. Laidlaw & Co.	Sapperton.....	1878	6,756	13,542	29	186	324,228
Alex. Ewen.....	Ewen, No. 1.....	1876	25,000	28,600	27	320	1,200,000
do.....	do No. 2.....	1891			20		
T. Ladner & Co.	Wellington.....	1880	7,275	13,000	23	180	349,200
J. H. Todd & Son.....	Richmond.....	1889	12,093	14,380	30	194	580,464
do.....	Beaver.....	1890	12,985	14,500	29	190	623,280
Bon Accord Fishing Co.	Sea Island.....	1890	11,240	14,450	34	164	339,520
J. A. Laidlaw & Co.	Delta.....	1878	6,771	13,542	29	176	325,008
H. E. Harloch & Co.	Harloch.....	1882	5,697	10,250	24	178	273,456
J. A. Laidlaw & Co.	Laidlaw's, No. 2.....	1891	6,750		29	170	324,000
Lulu Island Canning Co.	Lulu Island.....	1891	11,458		29	250	549,984
	Wadhams.....	1887	11,790	13,000	24	236	565,920
	British Columbia.....	1887	8,318	13,340	27	210	383,264
Anglo-British Columbia Packing Co. (Limited), Bell, Irving & Patterson, agents.....	British American.....	1887	4,191	16,000	23	165	201,168
	Canoe Pass.....	1889	4,030	11,000	25	150	193,440
	Phoenix.....	1887	7,824	14,062	30	200	375,552
	Britannic.....	1890	6,595	12,753	25	178	316,560
	Garry Point.....	1889	8,192	17,570	25	180	393,296
	Annandale.....	1891	200		20	80	9,600
	Dumfries.....	1891	5,000		20	120	240,000
M. Johnson, agent. ....	Fraser River Cannery.....	1876	8,000	12,000	25	165	384,000
	Total.....						8,527,552
<i>Skeena River.</i>							
B. C. Canning Co. (Ltd.).	Windsor.....	1878	9,700	12,850	48	226	465,600
A. B. Columbia Pac. Co.	North Pacific.....	1889	11,200	15,000	44	190	537,600
do.....	British American.....	1883	13,659	14,100	51	240	655,632
Turner, Beeton & Co.	Inverness.....	1878	9,875	13,750	42	184	474,000
Cuthbert & Byrnes.....	Balmoral.....	1886	10,000	12,845	46	280	480,000
Cunningham & Son.....	Skeena Cannery.....	1883	11,800	12,500	48	220	566,400
Laidlaw & Co.	Standard.....	1890	10,823	10,600	43	206	519,504
<i>Nas River.</i>							
J. McLellan's Cannery....	McLellan's Cannery.....	1888	5,477	12,500	48	134	262,896
B. C. Canning Co. (Ltd.).	British Columbia.....	1889	2,581	5,200	31	158	123,888
Laidlaw & Co.	Cascade.....	1889	3,000	7,000	40	146	144,000
<i>Rivers Inlet.</i>							
B. C. Canning Co., M. Johnson, agent.....	Rivers Inlet Cannery.....	1882	15,000	13,500	40	180	720,000
Victoria.....	Victoria.....	1882	10,000	10,000	35	160	480,000
McDowell & McNeil.....	Warnoch.....	1884	11,500	10,000	32	162	552,000
<i>Lowe's Inlet.</i>							
Cunningham & Rood.....	Lowe's Inlet Cannery....	1890	8,057	6,000	8	54	386,736
<i>Gardner's Inlet.</i>							
H. Price & Co.	Price's Cannery.....	1890	3,200	3,721	18	80	153,600
A. S. Spencer.....	Alert Bay Cannery.....	1881	650	7,339	8	46	31,200
	Total Coast.....						6,553,056
	Total Fraser River.....						8,527,552
	Grand Total.....						15,080,608



The most noticeable increase over last season's catch is in halibut, and in fish oil, viz. :—

1891—Halibut.....	1,130,000	lbs.	Oil.....	249,500	galls.
1890— “ .....	636,800	“	“ .....	162,264	“
		<u>          </u>			<u>          </u>
Increase .....	493,200	“		87,236	“

Both the halibut and fish oil industries are capable of being increased to an almost unlimited extent, and these fish will, in the near future, in a frozen condition, rank as one of our most important exports.

All other kinds of fish caught in the province are as yet valuable only for local consumption. They are practically unlimited in quantity, and their catch will increase in the same ratio as the population of the province. Notwithstanding the interruption caused to the fur seal fishery by the closing of Behring Sea, the catch of the provincial fleet aggregated the large number of 52,955 skins. The following schedule shows the number of vessels, boats and men engaged in the marine fur fishery during the season of 1891, together with the product and values :—

## B.—RETURN showing the Number of Vessels, Boats and Men engaged in

Name of Vessel.	Name of Owners.	Tonnage.	Value of Vessel.
			\$
W. P. Sayward..	Lang & Moss	59	8,000
Sierra		35	6,000
Letitia	P. Quachynne	28	1,000
Annie C. Moore..	Hackett & Co.	113	15,000
Minnie..	V. Jacobson.	46	8,000
Ocean Belle..	R. Hall & Co.	83	10,000
Sapphire..	Marvin & Co.	124	14,000
Triumph..	do	98	14,000
Maggie Mac	Dodd & Co.	71	10,000
Walter A. Earle	Thos. Earle	68	9,000
City of San Diego.	(American)	48	7,000
Mary Taylor	Carne & Munsie.	43	8,000
Sea Lion..	S. Collins	50	7,000
Geneva..	Hall & Goptell	92	12,500
Rosie Olsen	Dempster, Cook and others.	38	2,000
Pioneer	Carne & Munsie.	66	7,500
Aurora..	T. Harold	42	7,000
Beatrice..	W. Grant	66	7,000
Thistle (str.)..	M. Manson	147	25,000
E. B. Marvin.	Marvin & Co.	117	12,000
Oscar and Hattie..	J. L. Penny.	81	10,000
Wanderer	H. Paxton & Co.	25	3,500
Mascot		40	6,000
Mountain Chief.	Nowausune.	23	1,000
Mary Ellen	M. Moss.	69	7,000
Penelope	do	70	8,000
Kate..	Charles Spring.	58	4,000
Favorite..	do	80	8,000
Winnifred..		13	800
Maud S.	Brown Bros	97	9,000
Walter F. Rich.	Cameron & Munro	79	7,000
Hesperus..	McAlpin and others	20	2,000
Charlotte G. Cox.	Marvin & Co.	76	8,000
Katherine	J. L. Penny.	81	10,000
Umbria..	J. W. Pepett.	98	12,000
Carmelite..	Hackett & Co.	99	11,000
May Bell	Capt. Douglass	58	6,000
Theresa.	Babbington & Co.	63	9,000
C. H. Tupper.	Walker & Co.	99	12,000
Ainoko..	Capt. Grant	75	10,000
Viva..	Carne & Munsie.	92	11,000
Labrador	Whibly & Co.	25	3,500
Borealis	do	37	5,000
Annie E. Paint..	Bisset & Co.	82	10,000
Laura	Williams & Jones	19	1,800
Ariel..	S. W. Buknam.	91	9,000
Venture	D. Urquhart	48	5,000
Otto..	— Muir	85	10,000
C. D. Rand.	Burrard Inlet Sealing and Trading Co.	51	9,000
Vancouver Belle	Vancouver Sealing and Trading Co.	73	10,000
Eliza Edwards (str.)..	P. Trading and Navigation Co.	37	10,000
Canoes			
		3,378	418,606
Estimate of fur seal skins bought by dealers and not included in above.			

the Marine Fur Fishery, with Products and Values, for the Season of 1891.

No. of Men.		No. of Boats.	Value of Boats.	CATCH.			Total No.	Total Value.
White.	Indian.			Coast.	Sand Point.	Behring Sea.		
			\$					\$
6	25	13	1,250	187	734	801	1,722	50,495
	12	6	550	886			886	13,290
	12	6	550	4			4	60
23		7	650	46	442	1,588	2,076	31,140
6	20	12	1,150	308	373	22	703	10,530
23		7	650	170	568	1,170	1,908	28,590
20		8	750	50	974	2,435	3,459	51,585
23		7	650	176	666	171	1,013	15,135
24		7	650	137	548	3	688	11,320
20		6	550	198	848	1,021	2,067	31,140
17		5	450	96	418	641	1,155	17,325
18		5	450	54	445	264	763	11,445
19		6	550	354	584	82	1,020	15,300
23		6	550	3	224	267	494	7,410
3	16	9	550	40	176	52	268	4,020
21		6	550	162	712	1,484	2,358	35,370
5	15	11	1,050	53	340	47	440	6,600
5	22	12	1,150	59	136	876	1,071	16,365
26		7	650	9	294	82	385	5,775
23		7	650	216	462		678	10,120
29		5	450	54	409	1,062	1,525	22,875
4	12	6	550	7	20	330	537	8,055
5		2	150	7		79	86	1,290
	12	6	550	21			21	315
12	24	16	1,550	21	609	65	695	10,425
20		7	650	229	410	691	1,330	18,950
5	20	9	850	32		1,100	1,132	16,980
6	20	12	1,000	35	337	2,581	2,953	44,295
2	8	2	150	7		98	105	1,575
24		7	650		394	1,030	1,424	21,360
22		7	650		519	21	540	8,100
8		3	250	2			2	
20		6	500		517	1,519	2,036	
5	16	9	800		191	1,224	1,415	
23		7	650		405	504	909	
23		7	650		751	1,639	2,390	
19		5	450		701	241	942	
23		7	650		307	985	1,292	
24		7	650		235	374	609	
5	23	12	1,000		406		406	
6	23	6	500		1,261	731	1,992	
11		5	450		374	216	590	
5	25	13	1,100		473	1,547	2,020	
21		6	350			154	154	
6	14	6	350			61	61	
7	16	10	900			1,082	1,082	
4	20	15	1,200			659	659	
7	6	5	450			48	48	
23		5	450					
27		8	750				28	
15		5	450	1		49	50	
	35	16	1,750	404			404	
716	336	385	57,900	3,925	17,443	29,146	50,495	
							2,500	
							52,995	794,925



C.—RETURN showing the Number, Tonnage and Value of Vessels and Boats, and the Number of Men engaged in the Fisheries, Quantity and Value of Fishing Materials, Kinds and Quantities of Fish, &c., in the Province of British Columbia, for the Year 1891.

LOCALITY.	VESSELS AND BOATS EMPLOYED.						FISHING MATERIAL.				KINDS OF FISH AND FISH PRODUCTS.					
	Vessels.			Boats.			Gill Nets.		Seines.		Trawl Lines.	Salmon, barrels.	Salmon, fresh, lbs.	Salmon, smoked, lbs.	Salmon, in cans.	Sturgeon, lbs.
	No.	Tonnage.	Value.	Men.	No.	Value.	Fathoms.	Value.	Fathoms.	Value.						
Fraser River and South to American Boundary.	10	180	56500	23	767	38248	4441	119625	73420	450	1450	100	1203853	48200	8527552	259500
Fraser River to Howe Sound.	4	82	20300	16	16	860	32	1740	1300	1000	1500	520	100	550000	13100	65000
Howe Sound to River's Inlet.	1	20	4000	3	125	2500	750	16000	13000	250	400	.....	50	92000	10000	1733200
River's Inlet to Skeena River	7	184	55000	21	346	1450	1632	108200	55000	300	725	.....	250	90000	10000	4329072
Skeena River to Alaska Boundary.	3	22	4600	6	135	4800	448	28763	19862	.....	.....	.....	73	10000	18000	530784
East Coast of Queen Charlotte Islands.	.....	.....	.....	.....	12	1580	60	2000	2000	250	350	1500	50	1000	2000	.....
West Coast of Queen Charlotte Islands.	.....	.....	.....	.....	2	400	10	.....	.....	200	250	175	.....	.....	.....	.....
Cape Scott to Comox.	.....	.....	.....	.....	8	700	16	300	200	300	450	600	.....	15000	5000	.....
Comox to Victoria.	51	203	10150	150	45	3000	90	1040	600	4100	6100	4000	60	118000	10000	.....
Victoria to San Juan.	.....	.....	.....	.....	10	600	25	.....	.....	500	600	1500	.....	.....	.....	.....
San Juan to Cape Beale	2	40	1000	6	6	500	18	.....	.....	500	650	6000	.....	10000	5000	.....
Cape Beale to Cape Scott.	.....	.....	.....	.....	6	600	12	.....	.....	300	400	1000	.....	1000	.....	.....
Totals.....	78	713	151550	205	1478	68338	7550	17668	165482	7156	12475	15400	1353	2090853	121300	15170608
Fur seal fleet from Victoria, B.C.....	48	3197	.....	.....	358	32900	998	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fur seal fleet from Vancouver.....	4	181	.....	.....	22	2000	73	.....	.....	.....	.....	.....	.....	.....	.....	.....

KINDS OF FISH AND FISH PRODUCTS.																	
LOCALITY.	Hallibut, lbs.	Herring, lbs.	Herring, barrels.	Herring, smoked, lbs.	Oolachans, salted, brls.	Oolachans, fresh, lbs.	Oolachans, smoked, lbs.	Trout, lbs.	Assorted or Mixed Fish, lbs.	Smelts, lbs.	Rock Cod, lbs.	Tooshqua, lbs.	Skill, brls.	Fur Seal Skins, No.	Hair Seal Skins, No.	Fish Oils, gallons.	VALUE.
Fraser River and South to American Boundary.	96000	53000	52	2300	25	23000	2700	10000	9500	16000	5900	2500	..	..	..	1000	\$ 1,017,805
Fraser River to Howe Sound.	662000	85000	25	10000	250	10000	..	24000	50000	50000	40000	250000	32	..	..	10500	130,706
Howe Sound to River's Inlet.	2000	..	..	..	100	..	..	1000	1000	..	..	5000	..	..	..	2500	192,670
River's Inlet to Skeena River.	5000	..	..	..	100	1000	..	1000	..	..	..	..	25	2000	5500	5500	453,157
Skeena River to Skeena Boundary.	10000	5000	..	2000	525	13000	2000	600	10000	..	..	..	30	75	..	53000	67,379
East Coast of Queen Charlotte Islands.	25000	20000	125	2000	..	..	..	10000	50000	..	..	..	50	100	..	8000	34,512
West Coast of Queen Charlotte Islands.	50000	10000	..	2000	..	..	..	10000	25000	15000	93000	165000	..	..	..	8000	10,440
Cape Scott to Comox.	4000	10000	..	1000	..	..	..	10000	12000	15000	8000	19000	..	..	..	25000	23,270
Comox to Victoria.	250000	130000	..	12000	25	25000	..	5000	10000	10000	..	5000	..	..	..	9500	6,350
Victoria to San Juan.	16000	10000	..	..	..	..	..	..	..	..	..	..	..	..	..	15000	11,750
San Juan to Cape Beale.	10000	10000	..	..	..	..	..	..	..	..	..	..	..	..	..	100000	50,800
Cape Beale to Cape Scott.	6000	2000	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Totals	1130000	335000	202	31300	1025	72000	4700	63600	411500	81000	146900	449500	137	..	2175	249500	2,062,561
Fur seal fleet from Victoria, B.C.	..	..	..	..	..	..	..	..	..	..	..	..	..	50013	..	..	750,195
Fur seal fleet from Vancouver.	..	..	..	..	..	..	..	..	..	..	..	..	..	78	..	..	1,170
Fur Seal skins caught by Indians and sold in Victoria.	..	..	..	..	..	..	..	..	..	..	..	..	..	404	..	..	6,060
Estimate of fur and hair seals skins bought by dealers and not included above.	..	..	..	..	..	..	..	..	..	..	..	..	..	2500	3000	..	40,500
Oysters, 1,500, at \$2 per sack, \$3,000; clams, 5,500, at \$1.75, \$9,625; clams, in cans, 30,160 lbs., \$3,619.20.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	16,244
Mussels, 300, at \$1.75 per sack, \$525; shrimps and prawns, \$5,000.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5,525
Crabs, 504,000, at 5c. each, \$25,200; abalones, 3,000 lbs., at 20c. per lb., \$750; isinglass, 1,500, at 30c., \$450.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	26,300
Estimate of various kinds of fish consumed in the interior of the province, but not included in the above.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	100,000
Grand total.	..	..	..	..	..	..	..	..	..	..	..	..	..	52995	5175	..	3,008,755

It has been the practice in former years to add an estimate of fish consumed by the Indian population. It is very difficult to get an approximation of the amount.

Last year Mr. Mowat estimated it at \$3,257,000; this amount is as correct this year as last.

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## D.

## COMPARATIVE Statement of the Yield and Value of the Fisheries of British Columbia, for the Years 1890-91.

Kinds of Fish.	Quantity.	Price.		Value.	
		\$	cts.	\$	cts.
Salmon, in 1-lb. cans.....	15,170,608	0	10	1,517,060	80
do fresh..... Lbs.	2,090,853	0	10	209,085	30
do salted..... Brls.	1,353	12	00	16,236	00
do smoked..... Lbs.	121,300	0	20	24,260	00
Sturgeon, fresh.....	324,500	0	05	16,225	00
Halibut do.....	1,130,000	0	05	56,500	00
Herring do.....	335,000	0	05	16,750	00
do smoked.....	31,300	0	12	3,756	00
do salted..... Brls.	202	4	50	909	00
Oolachans, fresh..... Lbs.	72,000	0	05	3,600	00
do smoked.....	4,700	0	15	705	00
do salted..... Brls.	1,025	8	00	8,200	00
Trout, fresh..... Lbs.	63,600	0	10	6,360	00
Fish, assorted and mixed.....	411,500	0	05	20,575	00
Smelts, fresh.....	81,000	0	05	4,050	00
Rock cod, fresh.....	146,900	0	05	7,345	00
Tooshqua do.....	449,500	0	05	22,475	00
Skill, salted..... Brls.	137	12	00	1,644	00
Fur seal skins..... No.	52,995	15	00	794,925	00
Hair do.....	5,175	1	00	5,175	00
Fish oils..... Galls.	249,500	0	50	124,750	00
Oysters..... Sacks	1,500	2	00	3,000	00
Clams.....	5,500	1	75	9,625	00
do..... Cans	30,160	0	12	3,619	20
Mussels..... Sacks	300	1	75	525	00
Crabs..... No.	504,000	0	05	25,200	00
Abelones..... Lbs.	3,000	0	25	750	00
Isinglass.....	1,500	0	30	450	00
Estimate of shrimps and prawns.....				5,000	00
Estimate of fish consumed in the province and not estimated in above table.....				100,000	00
				3,008,755	10



E.

CAPITAL invested in the Fisheries and Fishing Material of British Columbia, during the Season of 1891.

Material.	Value.	Total.
	\$ cts.	\$ cts.
130 vessels, 4,109 tons.....	570,150 00	
1,858 boats .....	103,238 00	
277,668 fathoms of gill Net .....	165,382 00	
8,150 do seines .....	12,875 00	
31,750 do trawl lines.....	6,875 00	858,520 00
38 salmon canneries, complete.....	760,000 00	
14 oil factories.....	38,000 00	
2 freezing establishments.....	20,000 00	
6 salting stations.....	3,000 00	821,000 00
Season 1890 .....		1,679,520 00
Increase, 1891.....		1,511,279 00
		168,241 00
Sailors and seal hunters.....	1,112	
Fishermen and cannerymen .....	7,554	
	8,666	

The fisheries protection service on the Fraser River was very efficiently performed. The steam launch rendered it possible to efficiently protect the upper reaches of the river, as well as the lakes and creeks frequented by spawning fish. The rapidity of her movements at any stage of the tide rendered poaching and unlawful fishing too hazardous to be followed to any extent. Next in importance to the spawning places, to be well protected, is the mouth of the river. There is the weak point in the present system. In the night, when at least half of the salmon are caught in the canning season, this important point has never had any protection, for the reason that one, or even two men in a small boat could do nothing amongst the number of boats and nets which fish on the outer drift at night, and even if unlicensed boats were fishing amongst them, it would be almost impossible to detect them, or if detected, to identify the offenders. In view of these facts, I respectfully recommend that another steam launch be obtained for service, from Ladner's to the mouth of the river.

REPORTS OF THE FISHERY GUARDIANS TO THE INSPECTOR OF FISHERIES IN BRITISH COLUMBIA.

LOWER FRASER RIVER.

*Fishery Guardian C. F. Green* forwards the following report on the salmon fisheries under his supervision for the season commencing on the 1st April and ending on the 31st October last.

The spring salmon run was fairly good, though not many were packed at the canneries, the export trade taking all the surplus, as the fishermen obtain better prices from the exporters than from the cannerymen, and judging from the amount exported, I am glad to see this trade gradually increasing. I have reason to believe that the trade will assume larger proportions every year in consequence of the

demand from abroad. I may state that a car load of frozen salmon has been shipped to Germany. During this run there were over 100 boats and nets fishing in this district.

The Sâw-quai salmon run was very much in advance of the corresponding year of 1887. I should say that fully one-third more fish were packed during this season, which I think fully demonstrates that the hatchery is doing good work, and that the canneries are beginning to reap the benefit of it in an increased pack. During this run, there were over 400 boats and nets employed in the lower river under my jurisdiction.

The late runs of large salmon and cohoes were poor; too great a proportion of the large salmon were white, and as they have no commercial value, they are principally salted by the fishermen for local use.

I would like to draw your attention to the necessity of having a steam launch for the use of the fishery guardian of this district, now that the salmon fishing industry is assuming such large proportions. In 1887, there were seven canneries; this season there were fourteen at work. The fishing grounds extend over twenty miles, including the Sand Heads, and the fact of so many boats fishing makes it impossible for one man in a small row boat to entirely stop illegal fishing and keep the boats under proper control.

I consider that the oolachan and sturgeon fishing should be more extensively followed. They are at present only fished for local consumption, but I feel sure they could be caught in large quantities, and would pay to export as well as salmon.

#### NAAS RIVER.

*Fishery Guardian Thomas McNeish* submits the following report as Fishery Guardian of the Naas River for the past season.

I arrived at the Naas on the 6th of June and found all concerned ready to commence fishing, which they did on the 8th. The season proved a very poor one, but the fishermen faithfully observed the close time in spite of bad returns. The boat which was purchased for my use last season, but which arrived too late, was found very useful this season, and greatly facilitated my getting about the district. Before leaving, I stored it away at Mr. McLellan's cannery and beg to suggest that it be given a coat of paint before next season's work commences.

I beg to refer to my suggestion of last year as to a change being made in the weekly close time, viz., that fishing shall be discontinued from slack water nearest noon on Saturday, to slack water nearest 6 a.m. on the following Monday. My reason for suggesting this change is that the present regulations entail considerable loss and inconvenience upon the fishermen owing to the very short time that fishing can be prosecuted on Monday, on account of the rapid currents and strong tides which make it impossible to fish except at high and low water slack.

#### SKEENA RIVER.

*Fishery Guardian M. K. Morrison* reports generally, that the fishery regulations were well observed, and that although the catch for the season of 1891 was very small, as compared with the extraordinary catch of the previous year, yet it was not far below a fair average catch. Mr. Morrison also reports an abundant supply of salmon in the upper waters of the Skeena.

*Mr. C. H. Gesner* reports that the three canneries at River's Inlet had about completed their pack when he arrived there, the salmon having struck in early and in great abundance.

*Guardian Lomas*, of Cowichan, reports fishing good, and the fishermen in his district, prosperous. They fish principally for the Victoria market. Oil has been manufactured to a greater extent than formerly.

I have the honour to be, Sir,

Your obedient servant,

JOHN McNAB,

*Inspector of Fisheries for British Columbia.*



## APPENDIX G.

# ONTARIO.

### SYNOPSIS OF FISHERY OVERSEERS' REPORTS IN THE PROVINCE OF ONTARIO FOR THE YEAR 1891.

#### LAKE SUPERIOR DIVISION.

*Overseer Thos. A. Keefer*, in making his first annual report on the fisheries of Lake Superior, states that he experienced great difficulties in obtaining reliable data for the statistical statements. Fishermen were unable to give their individual catches: this information was sought from sub-officers, buyers, shippers of fish, &c. Interested parties appear to apprehend a curtailment of their privileges or an increase of the license fees, should their catch appear too large—others, who had been fishing more nets than they were licensed for, were also unwilling to give correct returns. The only remedy which Mr. Keefer can suggest is to compel fishermen and buyers to keep records of their catch and make returns to the nearest fishery officer. There was more fishing done this season than in the previous year; more nets were used, and although the license fees collected exceeded those of 1890 by \$2,215, still considerable unlicensed fishing was carried on. Fines were imposed to the amount of \$160; several nets and a boat were confiscated, the former being destroyed as directed. Owing to these seizures, the close season was better observed than ever before. The rough weather experienced during the month of November materially aided the observance of the law. Mr. Keefer recommends that the close season for salmon trout and whitefish be from 1st to 30th November, until some international arrangements can be arrived at with the neighbouring States of the Union; such as a uniform close season, the setting apart of certain reserves for the natural propagation of fish, and the establishment of artificial fish hatcheries in each country. There is now one reserve around Pie Island which greatly contributes to the keeping up of the fish supply in the vicinity; and the overseer recommends the setting apart of two others, around Lizard and Slate Islands. These valuable fishing and spawning grounds having been injured to a great extent through over-fishing by former licensees are now temporarily abandoned. He also recommends dispersing the fishermen at stated distances along the coast instead of licensing large areas of waters to big firms who care not how exhaustive the present catch may be, provided it proves remunerative on the moment.

There seems to be a tendency to increase the number of pound nets against gill net fishing. The size of mesh for the pots of the pounds should be regulated. The small meshed nets used in fishing for pickerel will catch immature whitefish and salmon trout. In gill net fishing, two men per boat handle an average of 3.625 fathoms of nets each. The fee should be rated per boat with a maximum length of nets, instead of so much per fathom as at present. Indians undoubtedly abuse the privilege granted them of fishing for their own use during the close seasons, and their agents should be directed to caution them especially against selling fish without license. Buyers of fish from Indians should also be made liable. There are no fishways in this district. The total value of the Lake Superior division is reckoned at \$177,681, an increase of \$27,000.

#### MANITOULIN ISLANDS AND GEORGIAN BAY DIVISIONS.

These districts, formerly under the charge of ex-Overseers Shackleton, Brinkman and Fraser, were last season placed under the supervision of *Capt. E. Dunn*, of the S.S. "Cruiser," who patrolled the waters till the end of the close season. He reports a decrease of 20 per cent in the yield of fish around Manitoulin Island, and an increase of \$28,000 in the division of Georgian Bay proper. This alleged decline may be due to over-fishing in the past, as most fishermen use more nets than they hold licenses for, but at present it is almost impossible to ascertain the exact quantity,



of nets fished by each licensee. If some system of registration marks and metallic tags were adopted, it would be of great assistance to fishery officers. Some fishermen have three sets of nets constantly in the water and a spare one on the beach being dried or repaired. The nets are seldom visited more than once a week. The consequence is that large numbers of fish are dead and decayed, and have to be thrown away with the offal. Capt. Dunn recommends that certain waters be set apart for the exclusive use of Indians opposite their reserves, outside of which no Indian or half-breed be allowed to fish without paying a license, and that all nets not marked with a metallic tag be liable to seizure. Many half-breeds, using as good fishing gear as whitemen, get off without paying fees, by claiming to be Indians.

The close season for bass and pickerel was often violated. Owing to the broken nature of the north eastern shore of Georgian Bay, it is impossible to guard it properly without a small steam launch, attached to the cruiser, drawing not more than 24 inches of water, to enable the officer to go through the thousand channels of this coast with sufficient despatch to defeat the wily poachers, who are too well organized to be caught with an ordinary row-boat. The close season for whitefish and salmon trout was better observed than before. Capt. Dunn is of opinion, that if all fishing tugs were required to lay up not later than one week after the close season begins, it would greatly contribute to the better observance of the law. The statements furnished by Overseers G. S. Miller, of Owen Sound, and John Donaldson, of Collingwood, are included in his statistical tables. The value of the fisheries of Georgian Bay proper is computed at \$558,551, and that of the waters around Manitoulin Island at \$233,719.

#### LAKE HURON DIVISION.

*Overseer R. H. Murray* reports a successful fishing season, with the exception of the Sauble Beach Indians, whose catch of herring was the lightest known for years. In Southampton, fishing was better than for the last three years. At the Fishing Islands, the catch of herring was also exceptionally good. Fishermen are now realizing the importance of observing the close seasons, and they drew their boats out of the water on the 3rd November. They do not object to see it commence on the 1st November, but they are opposed to any close time for herring. The total value of the fisheries in this district is computed at \$38,180.

*Overseer Hugh McFayden* states that trout fishing was as good as last year in the Saugeen River. The sportsmen camped on its banks were as numerous as ever.

*Overseer W. H. Ball* reports an improvement in the yield of fish, especially in the vicinity of Goderich, which may be attributed to the amelioration of fishing grounds. At Kincardine and Inverhuron, the business was unprofitable and boats sailed further northward. This officer suspects that the close season is occasionally violated, and he recommends that the fall close season be made to include the month of December as well as November, fishermen then would have no excuse for keeping their nets on reels, and their boats ready to sail after the 1st November; they now say that they might fish next month. Fishermen often put out nets at the end of November with the intention of raising them in December, but stormy weather often prevents them doing so, and the consequence is that the nets are left there till broken up by the weight of dead fish which remain to pollute the grounds. Mr. Ball is opposed to any protection for sturgeon and all fish of the sucker tribe, as experience goes to prove that they live almost exclusively on the spawn of other fish. The total value of the fisheries of this district is given at \$61,000.

*Overseer H. B. Quarry* again reports having experienced great difficulty in procuring statements of their catch from the fishermen, and he had to forward his report before he could hear from several of them. This accounts to a certain extent for the short catch of his division, valued only at \$12,900, while in 1880 it was over \$26,000. Rough weather also injured several nets, all tending to make it a poor fishing season.

*Overseer J. C. Pollock* reports fishing in his division as inferior to that of the previous years, but he thinks that the returns are under-estimated by the fishermen. West of Sarnia, where a few years ago one haul of the seine would bring as many as

fifteen thousand fish, now a basket full is considered a fair haul. No whitefish and very few pickerel are caught there now. North of Point Edward, the scarcity of fish is ascribed to the numerous pound nets set between Kettle and Blue Points, which are owned by American fishermen. Hardly any fish is landed on the Canadian side, tugs pass regularly and take all the fish to the other side. The total yield is only valued at \$6,150.

#### LAKE ST. CLAIR DIVISION.

*Overseer Chas. W. Raymond* reports fish as abundant as last year, but prices ruled lower, owing to the distance fish have to be shipped (16 miles) by waggon from Mitchell's Bay. Very few sportsmen visited Lake St. Clair last season. One boat came over from across the boundary, but left as soon as notified by this officer. The close season was well observed, and no violations of the fishery regulations came under his notice.

#### THAMES RIVER.

*Overseer Timothy McQueen* states that there were twenty-two fishing stations worked in his district last season by one hundred and ten men. Pickerel is the staple fish, nearly 50,000 lbs. of which were caught. Over 100,000 lbs. of coarse fish, such as mullets, catfish and shiners were shipped to American markets, at fair prices, besides the quantity used for home consumption. The noticeable improvement in the yield of fish is due to the mild winter season and to the gentle current in the Thames favouring the fishermen's operations later than usual. The fishermen of this division are reported as a law-abiding class, and fully realize the importance of protective measures tending to improve the productiveness of this branch of industry. Not a single violation of the regulations came to his knowledge.

*Overseer Peter McCann* states that fishing was good, especially angling. He secured three convictions for infractions to the Fisheries Act, one for neglecting to put a fish-way in good order, and the other two for spearing. There is considerable spearing up the river, but this officer has been unable yet to obtain sufficient evidence to ensure a conviction. Every dam in his division is now provided with a fish-pass; the last one being built last summer.

#### DETROIT RIVER.

*Overseer Joseph Boismier* reports that fishing is steadily declining in Detroit River. This he attributes to the sewerage from Detroit and Windsor, which pollutes the entrance of the river to such an extent that whitefish and herring will not enter. The fact that fishing at Fighting and Bois Blanc Islands was as good as formerly, confirms him in this opinion. Fall fishing does not now repay the trouble. The fisheries of this division are valued at only \$3,000, while in 1890 the amount was \$11,200.

#### LAKE ERIE DIVISION.

*Overseer David Girardin* reports a decrease in the catch of every kind of fish, which he attributes more to stormy weather than to anything else. Strong gales prevailed from 1st October to 17th November, injuring the nets to such an extent that they could not be used again. There was a big run of fall herring, and had the fishermen been ready, large catches would have been made. Sturgeon is getting scarce. White bass were more plentiful than for the past few years. He considers that fishing of every kind should be prohibited between the 20th June and 10th September. The fishermen would be willing to adhere to this. He investigated complaints that sawdust and rubbish were thrown into the lake at South Bay, and had the practice stopped. Grape vines thrown on the beach are becoming a great nuisance to net fishermen. The total value of the Pelee Island fisheries only amounts to \$26,735, while two years ago it was over \$66,000.

*Overseer Wm. Prosser* states that notwithstanding the heavy gales at the end of the season which destroyed the nets, the yield of fish equals that of 1890. Large catches of herring were made in October amounting to nearly one million and a half pounds. The catch of sturgeon was light; the water being too clear when these fish



neared the shores. The whole yield of this division is valued at \$82,500, about the same as last year.

*Overseer John McMichael* reports a large falling off in the yield of the fisheries of his division. This he hardly knows how to account for; as it cannot be attributed to scarcity of fish alone, good catches having been made when the weather and water were favourable. For some time during the summer the water became very warm and so clear that objects could be seen at a depth of 30 feet. Fall herring were large and of good quality, and such fishermen, whose nets were in good shape made large hauls. With the exception of one party, who was fined \$20 for illegal fishing, the close seasons were fairly observed. The total value of the fisheries of the Kent and Elgin division is reckoned at about \$100,000 each; last year they aggregated to \$250,000, a decrease of 20 per cent.

*Overseer D. Sharp* reports a slight falling off in the fisheries of his division, although large individual lifts or hauls were made especially above Turkey Point, even as late as the 26th December. He alludes to the damage caused by heavy gales in October and November. To this, may be ascribed the diminished yield. A single fisherman lost \$400 worth of nets. The total catch is valued at nearly \$30,000, that is about \$5,000 less than in 1890.

#### LAKE ONTARIO DIVISION.

*Overseer Fred. Kerr* reports the common herring as plentiful as ever; in Burlington Beach, the hauls were the largest known for years. This run lasted for about six weeks, commencing 1st October. It is a noticeable fact, that herrings were not seen at Niagara, where they used to be so abundant. Ciscoes are not improving, few were taken until late in the fall. They should be protected during their spawning time and a regulation size mesh adopted for them. Whitefish were scarce. Some splendid specimens were, however, taken in June at Burlington Beach, but owing to contrary winds the fish did not remain there long. Salmon trout proved above an average; good catches were made, especially at Grimsby and Winona. Sturgeon fishing at Niagara River was not so successful as during previous years. At Ridgeway, Lake Erie, pound nets were lifted containing 100 large fish at a time; but at Fort Erie they seem to have totally disappeared.

Two fishways were constructed at York and Caledonia in the Grand River under Mr. Kerr's directions. He will test their efficiency in the spring. The close season was fairly well observed. Some nets illegally set in Burlington Bay were seized. Small gill nets belonging to Buffalo fishermen, who were in the habit of fishing in Canadian waters at Point Abino, were also confiscated. The use of a small tug in the vicinity of Port Dalhousie would be of great assistance to check American poachers. The total value of the fisheries of this division amounts to \$38,152, about \$4,500 of which is in the Lake Erie portion of his district—a decrease of 40 per cent from last year.

*Overseer Wm. Sargent* reports the best run of common herring known for the last twenty years. Ciscoes, which are the staple fish of this division, were also plentiful. Fishing for ciscoes generally begins during the middle of September and lasts until 1st April. Fishermen go out as far as 15 to 20 miles in the lake and fish for ciscoes in between 50 and 65 fathoms of water, but he does not believe that they ever spawn in that depth of water, because in July and August they are found in shallow water from one to two miles out. Bass is steadily improving. Trout and whitefish gave about an average yield. The whole catch of fish is valued at \$40,590.

*Overseer Wm. Helliwell* reports a decreased catch of fish in the waters under his charge, which he attributes more to a less vigorous prosecution of the fisheries than to a scarcity of fish; a few of the principal fishermen having taken to some other industry. He experiences great difficulty in securing reliable returns from the fishermen respecting their catch, and he thinks that renewal of licenses should only be given on the condition of a better disposition to furnish the officer such information as the latter may require for statistical purposes. Some protection should be given to suckers frequenting the streams during their spawning time, as they cannot long withstand the wholesale slaughter which is now made on them. Formerly, mullets, a superior fish to suckers, used to come in the spring the same



way for the purpose of spawning, but they have now become entirely exterminated. The total value of these fisheries is made up at \$7,000.

*Overseer Charles Gilchrist* states that salmon-trout fishing in Lake Ontario was better than it has been for years. Several fishermen have determined to prepare on a large scale for this kind of fishing for next season. Over 10,000 lbs. of trout are returned this year where only 600 lbs. were given in 1890.

At Rice Lake, the yield of bass and maskinongé is also reported larger than before. The fish were abundant, and he does his best to prosecute poachers rigorously in order to secure all possible protection to these beautiful waters. The aggregate catch is estimated at 250,000 lbs. Only eleven foreigners took permits to angle at Rice Lake last season. Mill-owners on the Otonabee were looked after sharply. Several of them were brought before the Police Magistrate and a few were fined. Next season he expects to see the law better respected. The whole yield of this division is valued at about \$20,000, an increase of 10 per cent over 1890.

*Overseer Nelson Simmons* reports a slight improvement in the yield of bass and maskinongé. One party alone caught 500 bass averaging 3 lbs. each. He believes that fishermen intentionally underrate their catch, and that the aggregate should be far more than 50,000 lbs. Fishing for pickerel and pike was carried on till the end of December. There is a falling off in sturgeon and other coarse fish; no net fishing being allowed in Trent River. The whole value of the fisheries of his division amounts to \$10,576, about the same as in 1890.

#### PRINCE EDWARD AND BAY QUINTÉ DIVISION.

*Overseer W. P. Clarke* reports that although fishing was not prosecuted so vigorously as formerly, the result is about the same. Whitefish were late getting up Bay Quinté, but they were of a large size and more abundant than the previous year. Over 70,000 lbs. were caught in this district. The Sawdust Act was well observed. Mr. Clarke visited eight fish-ways on the Moira River, four of which were in fair condition; the owners of the other four promised to repair them without delay. He convicted four parties for illegal fishing, and six for violations of the close season. The fisheries are valued at \$26,000.

*Overseer Joseph Redmond* reports a considerable increase in every kind of fish except herring, which is attributed to a more vigorous prosecution of the fishing industry. Whitefish are improving; the catch exceeding that of 1890 by over 80 per cent. This is ascribed to a better observance of the close seasons and to other protective measures, as well as to the planting of fry in that neighbourhood. Pickerel and pike show enormous increases. The fishery laws were well observed and this officer came across no abuses in his district. He is not favourable to granting protection to pike and other coarse fish as they destroy the finer grades of fish. The total value of the fisheries of his division amounts to \$51,000; an increase of over 80 per cent over that of last year.

#### LENNOX, ADDINGTON AND FRONTENAC DIVISION.

*Overseer A. D. Sills* reports the catch of fish in his division as exceeding that of previous years; the catch of whitefish especially being more than treble that of 1890, the fishing season keeping open till the end of December. The various close seasons were well observed. He complains that American citizens come to Hay Bay in yachts, and slaughter our fish by hundreds without hindrance. Something should be done to protect and preserve our fisheries for our own people, who are loud in their complaints against such destruction of fish in Canadian waters by foreigners. The whole fisheries are valued at \$13,000, more than double the value of last year's yield.

*Overseer R. R. Finkle* returns a slightly increased catch over that of 1890, and reports the close season as well observed. The whole yield of his division is valued at \$13,000.

*Overseer George Lake* reports more fish caught in the inland waters under his charge than last year. Several seizures were made for violation of the laws; four hoop-nets were confiscated in Depot Lake and eleven herring nets in Green Bay. There are no fish-ways in this division yet, but he recommends one to be built at the foot

of Bob's Lake. He also recommends the granting of licenses for herring nets for one month during the fall to actual settlers, for their own use. These fish cannot be caught otherwise.

*Overseer Robert A. Gilbert* estimates the catch of fish of his division, mostly trout, at about 10,000 lbs., all used for home consumption. Owing to the bountiful harvest this season, there was less fishing than formerly. There are no fish-ways in this division. The close seasons are fairly well observed.

*Overseer H. R. Purcell* reports that no other fishing implement but hooks and lines were used in the inland waters under his charge. Although the catch is small, he never knew bass to have been so abundant as they were there last season. Several cases of violation of the Sawdust Act came before him. Two mill-owners were fined \$20 each, but there was not sufficient evidence to convict the others. American sportsmen visiting Canadian waters should pay a permit of at least a couple of dollars for the privilege of angling and trolling therein.

#### WOLFE AND KINGSTON DIVISION.

*Overseer Thomas Merritt* reports angling for bass as remarkably good. So much attention was devoted to bass fishing, that coarse fish was neglected and short catches of the latter are returned. The close seasons were well observed. There are no fish-ways in this division and none are required. The catching of small bass under half a pound in weight should be prohibited, and these fish, when accidentally caught should be liberated alive.

*Overseer Peter Kiel* states that the fishing business has ceased to be remunerative in his division; old fishermen having sought other employment. The Kingston markets are now supplied from the western great lakes or from the Lower St. Lawrence. Salmon trout and whitefish only come to shallow water shortly before their spawning time, and stormy weather prevents their being sought for after November. Hardly any were caught in his division last year. The law makes the mesh of nets for whitefish and salmon-trout identical ( $4\frac{1}{2}$  inches extension measure). It should be at least  $6\frac{1}{2}$  inches for salmon-trout, as their average weight is 8 lbs., while that of whitefish is only 2 lbs. American sportsmen visit our waters with the most alluring bait, either artificial or with live minnows, and the quantity of bass and pickerel they take is astonishing. The total value of the fisheries for the whole Kingston district does not now reach \$3,000.

#### ROCKPORT, BROCKVILLE AND CORNWALL DIVISION.

*Overseers Wallace, Hunt, Poole, McGarity and Mooney* have charge of the above named divisions. These waters are mostly frequented by pleasure seekers giving employment to numerous boatmen. The officers return only 23,000 lbs. of bass, 49,000 lbs. of pike and about 7,500 lbs. of pickerel. The total yield is valued at \$6,500, a decrease of over 75 per cent. when compared to 1890.

#### PRESCOTT, RUSSELL AND CARLETON COUNTIES DIVISION.

*Overseers P. St. Pierre, O. Miron and W. Boucher* return about an average catch; pike and maskinongé being the principal kinds of fish, aggregating about 25,000 lbs. Even coarse fish are steadily declining, only 63,000 lbs. being taken against 90,000 lbs. in 1890. The total value of these fish is given at \$4,436.

#### LAKE NIPISSING DIVISION.

*Overseer J. S. Richardson* reports a slight falling off in the yield of his division, which he attributes to warm weather in the fall, as at the time of writing his report, in December, the ice had not sufficiently formed to allow fishing through. The close seasons were fairly well observed, and he reports no violations of the fishery laws.

#### PARRY SOUND AND MUSKOKA DIVISION.

*Overseer George R. Steele* states that he visited nearly all the waters under his charge during the summer months. Three cases of illegal fishing during the close season for pickerel came under his notice, but he did not consider the evidence sufficient to warrant prosecution. The sawmills were also inspected and no direct



violations of law noticed, except in two cases, where the rubbish was deposited too near the edge of the stream. He recommends the issue of angling permits to settlers at nominal fees and at \$1 each to non-residents. Net fishing permits could also be granted to *bonâ fide* settlers to fish for their own use with the understanding that the first abuse of the privilege would result in the cancellation of the license.

*Overseer Henry W. Gill* states that some of the best angling grounds in Ontario are to be found in his division, and they were visited by a large number of sportsmen and pleasure seekers. He made an example of a certain individual from whom he could not collect a fine which he had imposed upon by having him committed to the common gaol for eight days. This spread like wild-fire and completely checked poaching in that part of his district. Sawmill owners were generally willing to accept his suggestions respecting the keeping of rubbish out of the water, and he experiences no trouble from that source now.

*Overseer J. R. Rumsey* says that the customary number of tourists and sportsmen was less than during the previous season. Netting being prohibited in his division, no herring or whitefish were taken. The injurious practice of spearing has considerably diminished, greatly owing to the voluntary assistance given by settlers, and he hopes to be able to finally suppress it. He seized a couple of gill nets, but could not discover the owners. Mill-owners now take care of the sawdust from their mills. Two of them at Burk's Falls had to be prosecuted and fined. Another fine was imposed on a certain party for having speckled trout during close season. A fish-way is to be constructed at Burk's Falls so soon as the water permits, the material being on the spot.

#### LAKE SIMCOE AND COUCHICHING DIVISION.

*Overseer L. S. Sanders* states that as Lake Simcoe is set apart for the natural propagation of fish, the only fishing carried on there is angling and trolling. Hook and line fishing was not successful as in previous years, but trolling was better in deep water. So many fish were offered for sale in towns and villages that some people were under the impression that netting was carried on, but on investigation this officer found these fish were caught with night lines. There does not seem to be any scarcity of fish in Lake Simcoe; they are as abundant as ever, but it seems they are hard to catch. The close season was well observed.

*Overseer Wm. McDermott* reports that the fishery laws were better observed this season than ever before in his division. He hopes that this state of things will continue. The fish-ways are in good order. Mill-owners have come to the conclusion that they cannot with impunity continue to dump the refuse of their mills in the streams. He thinks that the numerous convictions made by him in 1890 had a salutary effect. The close seasons were well complied with. Netting and spearing have been reduced to a minimum. Some illegal fishing was reported to have taken place in Holland River without sufficient evidence to warrant a conviction. Maskinongé and bass still abound in Holland River. Speckled trout are more plentiful near the head waters of large streams than in the small tributaries where it is alleged the severe frosts of the past winters freeze these waters to the bottom. As the country opens and settles, the rivers watering the woodlands become puny creeks after civilization has passed.

#### PETERBOROUGH COUNTY DIVISION.

*Overseer G. W. Fitzgerald* reports a good catch of bass and maskinongé, but a scarcity of salmon-trout. No net fishing is allowed in these inland waters. There is still quite a lot of snaring done during the winter months. He intends looking sharply after this mode of fishing next winter as he knows better where to find the poachers. It takes him one week to visit the whole of his division in a canoe. There are no fish-ways yet, but there should be one at Omemee, on Pigeon Creek. The mill-owners are doing their best to carry out the regulations respecting the disposal of their rubbish. He visited ten mills, some of which were dumping sawdust too near the water's edge; they are now keeping it further back. One planing-mill owner was convicted for allowing his rubbish to drift into the Otonabee River.



RETURN of the Number and Value of Vessels, Boats and Fishing Materials, the  
Province of Ontario,

NAME OF DISTRICT.	VESSELS AND BOATS EMPLOYED.							FISHING	
	Vessels.				Boats.			Gill Nets.	
	No.	Tonnage.	Value.	Men.	No.	Value.	Men.	Fathoms.	Value.
<i>Lake Superior Division.</i>			\$			\$			\$
Upper Division—Including Thunder Bay and all stations from Pigeon River to Lamb Island.....	6	230	10700	24	41	3925	75	30000	5250
Central Division—Jackfish, Port Caldwell and Peninsula.....	1	14	800	4	11	950	24	10000	2250
Lower Division—From Pic River to Sault Ste. Marie, including Michipicoten and Caribou Islands .....	1	125	4000	4	22	2150	43	22500	4050
Totals.....	8	369	15500	32	74	7025	142	62500	11550
<i>Manitoulin Islands and Vicinity.</i>									
Grand Batture.....					5	700	12		
Cape Roberts.....	1	28	4000	6				10000	1000
Green Island.....					2	400	5	9000	900
Duck Islands.....	2	40	6000	10	8	2000	24	50000	5000
Burnt Island.....					2	400	4	2000	200
St. Joseph Island.....					3	400	5		
Seine Island.....					2	400	5		
Cockburn Island.....					2	300	4		
Meldrum Bay.....					3	500	6		
Gore Bay.....	2	58	2000	16	1	200	2	40750	1750
South Bay.....					5	1000	15	9000	1500
Squaw Island.....	3	70	6000	15	34	6800	75	135000	21000
Killarney.....					6	1200	15	18000	1500
Rattlesnake Harbour.....					1	50	4		
Totals .....	8	196	18000	47	74	14350	176	273750	32850

Number of Men employed, &c., with the Kinds and Quantities of Fish, in the  
for the Year 1891.

MATERIALS.		KINDS OF FISH.									Fish used for Home Consumption, lbs.	VALUE.
Pound Nets.		Whitefish, barrels.	Whitefish, lbs.	Trout, lbs.	Trout, barrels.	Herring, fresh, lbs.	Sturgeon, lbs.	Pickeral, lbs.	Pike, lbs.	Coarse Fish, lbs.		
No.	Value.											
	\$											\$ cts.
52	10400	185	702265	350840	200	30000	41560	65536	.....	.....	50000	103,585 60
1	200	.....	1000	25000	50	.....	.....	.....	.....	.....	5000	3,230 00
21	4200	120	202200	391460	1300	.....	2400	6000	3000	.....	25000	70,866 00
74	14800	305	905465	767300	1550	30000	43960	71536	3000	.....	80000	177,681 60
8	3200	.....	18000	14000	.....	.....	65000	32000	.....	.....	900	8,367 00
7	2800	.....	40000	18000	.....	.....	10000	20000	.....	.....	1500	6,645 00
.....	.....	.....	8000	10000	.....	.....	.....	.....	.....	.....	700	1,661 00
5	2000	.....	180000	340000	.....	.....	20000	.....	.....	.....	4000	49,720 00
2	800	.....	30000	20000	.....	.....	.....	10000	.....	.....	280	4,908 40
4	1200	.....	25000	12000	.....	.....	1500	1000	.....	5700	300	3,520 00
2	1000	50	22000	.....	250	.....	500	600	.....	.....	250	4,827 50
2	800	.....	23000	12000	.....	.....	.....	300	.....	.....	100	3,058 00
3	1300	.....	30000	35000	.....	.....	500	.....	.....	.....	300	5,939 00
4	1600	.....	69800	87700	.....	.....	38700	.....	.....	.....	.....	16,676 00
5	3000	35	129500	105000	9	5000	10 60	30000	.....	.....	.....	23,060 00
.....	.....	80	621000	385000	52	.....	.....	.....	.....	.....	.....	89,500 00
.....	.....	.....	75600	5000	.....	.....	.....	.....	.....	.....	.....	6,548 00
.....	.....	.....	25500	70000	.....	.....	.....	5000	.....	.....	.....	9,290 00
42	17700	165	1297400	1113700	311	5000	137200	98900	.....	5700	8330	233,719 90

RETURN of the Number and Value of Vessels, Boats and

NAME OF STATION.	VESSELS AND BOATS EMPLOYED.						FISHING MATERIALS.	
	Vessels.				Boats.			Gill Nets.
	No.	Tonnage.	Value.	Men.	No.	Value.	Men.	Fathoms.
			\$			\$		\$
<i>Georgian Bay Division.</i>								
Bustard Islands .....	2	45	6000	10	22	4400	60	95000
Byng Inlet .....	1	20	2500	5	21	4200	54	85000
Point au Barril .....	1	25	3000	5	17	3400	41	66000
Mink Island .....					12	2400	27	36000
Campbell's Rock .....					3	600	11	9000
Waubashene ..	1	15	700	3	14	1000	27	42000
Midland .....					14	2800	35	42000
Collingwood .....	5	75	3500	25	92	21700	275	336000
Thornbury ..								
Nottawasaga River .....								
Meaford .....	2	40	3500	8	8	1200	18	3000
Vail's Point ..					5	750	10	2000
Leith .....					5	350	10	1500
Owen Sound .....	1	15	2500	4	6	500	12	2000
Presqu'île .....					3	200	6	800
Cape Commodore .....					3	200	6	800
Big Bay .....					3	200	9	6000
Cape Croker (Indians) .....								
Lion's Head .....					2	175	4	3500
Tobermoray .....	4	60	12000	24	3	600	7	33000
Totals .....	17	295	33700	84	233	44675	612	763600



Fishing Materials, &c., Province of Ontario, &c.—Continued.

KINDS OF FISH.												Fish used for Home Consumption, lbs.	VALUE.
Whitefish, brls.	Whitefish, lbs.	Trout, lbs.	Trout, brls.	Herring, brls.	Herring, fresh, lbs.	Sturgeon, lbs.	Maskinongé, lbs.	Bass, lbs.	Pickarel, lbs.	Pike, lbs.	Coarse Fish, lbs.		
65	439300	332600	19						22000				\$ 70,344 00
50	285150	247700	34						21000				49,472 00
	251200	100500							50000				32,646 00
	150200	101100										325000	31,876 00
	42000	19110							1000				5,321 00
	63110	26200			30000	7000	10640	10300	87700	25300	22000		16,855 20
	154720	80600			4600				40000				22,621 60
514	1000000	937600	400			43820		3410	247500	75813	25000	248000	210,089 45
10	5000	120000	25						500		1000	2000	12,865 00
	1000	130000	20								1200	1000	13,346 00
		20000	10								1000	1000	2,160 00
		50000	12	10	150000				1000		15000	5000	11,815 00
		10000			50000				100		5000	2000	3,215 00
	1000	12000			60000				200		300	1000	3,729 00
	5000	11000											1,500 00
50	25000	100000	150										14,000 00
	5100	20000											2,408 00
64	328100	269800	42										54,288 00
753	2755880	2588210	712	10	294600	50820	10640	13710	471000	101113	70500	585000	558,551 25

## RETURN of the Number and Value of Vessels, Boats and

NAME OF STATION.	VESSELS AND BOATS EMPLOYED.						FISHING MATERIALS.						
	Vessels.				Boats.		Gill Nets.		Seines.		Pound Nets.		
	Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Fathoms.	Value.	Fathoms.	Value.	Number.	Value.
<i>Lake Huron Division.</i>			\$			\$			\$		\$		\$
Fishing Islands.....					3	450	10	900	2200				
Sauble Beach.....					12	300	60			2400	1800		
Southampton.....					40	4000	120	100000	11500				
Saugeen River.....													
Port Elgin.....													
Inverhuron.....					2	90	4	400	100				
Kincardine.....					3	360	7						
Goderich.....	3	81	5500	18	5	1050	14	45000	7500			7	1700
Bayfield, Grand Bend and Blue Point.....	2	46	5500	8	14	1280	42	.....	.....	120	25	51	8840
From Blue Point to Point Edward.....					12	420	47	.....	.....	466	1450	.....	.....
Totals.....	5	127	11000	26	91	7950	304	146300	21300	2986	3275	58	10540
Total for Georgian Bay	17	295	33700	84	233	44675	612	763600	129680	.....	.....	.....	.....
do Manitoulin Ids.	8	196	18000	47	74	14350	176	273750	32850	.....	.....	42	17700
Grand total of whole of Lake Huron.....	30	618	62700	157	398	66975	1092	1183650	183830	2986	3275	100	28240

Fishing Materials, &c., in the Province of **Ontario**, &c.—*Continued.*

KINDS OF FISH.													VALUE.
Whitefish, barrels.	Whitefish, lbs.	Trout, lbs.	Trout, barrels.	Herring, barrels.	Herring, fresh, lbs.	Sturgeon, lbs.	Maskimongé, lbs.	Bass, lbs.	Pickereel, lbs.	Pike, lbs.	Coarse Fish, lbs.	Home consumption, lbs.	
													\$ cts.
.....	100000	40000	.....	20	33500	.....	.....	.....	.....	.....	.....	.....	12,000 00
750	.....	.....	600	2500	.....	.....	.....	.....	.....	.....	.....	.....	1,430 00
.....	.....	50000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	24,750 00
.....	.....	.....	.....	.....	12000	.....	.....	.....	2000	.....	10000	24000	5,000 00
.....	.....	.....	.....	.....	8000	.....	.....	.....	.....	.....	.....	8000	1,600 00
.....	.....	33000	.....	.....	10000	.....	.....	.....	1200	.....	5000	49200	560 00
.....	5000	483000	.....	.....	12000	5900	.....	11000	3200	200	25000	81000	5,386 00
.....	12900	3300	.....	.....	20100	106000	.....	.....	65000	.....	2255	35700	53,544 00
.....	.....	550	.....	20	51440	28300	.....	.....	45100	.....	.....	.....	12,914 05
750	117900	609850	600	2540	147040	140200	.....	11000	116500	200	42235	197900	6,155 60
753	2755880	2588210	712	10	294600	50820	10640	13710	471000	101113	70500	585000	123,339 65
165	1297400	1113700	311	.....	5000	137200	.....	.....	98900	.....	5700	8330	558,551 25
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	233,719 90
1668	4171180	4311760	1623	2550	446640	328220	10640	24710	686400	101313	118435	791230	915,610 80



RETURN of the Number and Value of Vessels, Boats and

DISTRICTS.	VESSELS AND BOATS EMPLOYED.						FISHING MATERIALS.								
	Vessels.				Boats.		Gill Nets.		Seines.		Pound Nets.		Hoop Nets.		
	Number.	Tonnage.	Value.	Men.	Number.	Value.	Men.	Fathoms.	Value.	Fathoms.	Value.	Number.	Value.	Number.	Value.
<i>Lake St. Clair Division, including tributaries.</i>			\$			\$		\$		\$		\$		\$	
Point Edward to Baby's Point..	...	...	...	...	15	345	46	...	...	634	940	...	...	...	...
Mitchell's Point.....	...	...	...	...	12	300	22	...	...	1240	650	...	...	...	...
Thames River.....	...	...	...	...	22	222	110	...	...	752	600	...	...	...	...
Stony Point to Windsor..	...	...	...	...	24	880	74	...	...	720	1760	4	950	...	...
Detroit River, including Bois Blanc and Fighting Islands..	...	...	...	...	16	450	56	...	...	13	1500	...	...	2	120
Totals .....	...	...	...	...	89	2197	308	...	...	3359	5450	4	950	2	120
<i>Lake Erie Division.</i>															
Point Pelee Island.....	...	...	...	...	26	1830	54	...	...	...	...	28	5560	...	...
do mainland.....	...	...	...	...	59	4603	80	...	...	...	...	46	15100	...	...
Coast fronting on County Kent.	1	123	12000	11	48	4730	63	300	90	110	180	55	8550	...	...
do do Elgin.	7	96	15200	42	38	3225	25	1700	190	100	75	50	18300	...	...
Houghton to Rainham, including inner and outer bays and Turkey Point. ....	6	100	7050	9	42	2515	120	6850	1875	4105	1840	21	5500	...	...
Long Point Island. ....	...	...	...	...	12	240	21	6400	1240	...	...	...	...	...	...
Cayuga to Low Banks, including Grand River.....	1	22	4000	4	21	435	30	6560	1860	312	355	...	...	...	...
Low Banks. ....	...	...	...	...	18	625	27	2300	500	650	350	...	...	...	...
Point Colborne to Fort Erie....	1	16	1000	3	8	725	8	3500	530	150	5	6	2100	...	...
Totals .....	16	357	39250	69	272	18928	428	27610	6285	5427	2875	206	55110	...	...

Fishing Materials, &c., in the Province of Ontario, &c.—Continued.

KINDS OF FISH.											VALUE.
Whitefish, lbs.	Trout, lbs.	Herring, barrels.	Herring, fresh, lbs.	Sturgeon, lbs.	Maskinonge, lbs.	Bass, lbs.	Pickarel, lbs.	Pike, lbs.	Coarse fish, lbs.	Home consumption, lbs.	
											\$ cts.
.....	.....	10	6500	10000	.....	150	38940	850	2300	.....	2,972 50
33200	50000	697	87100	2060	170	14975	325	4080	40264	2300	2,395 67
3700	.....	.....	6600	31000	1060	4000	65960	5150	104580	6250	21,530 70
18625	.....	.....	6800	1925	100	6100	39400	6200	138000	1700	9,320 60
55525	50000	707	107000	44985	1330	400	2900	4900	24000	.....	3,017 50
.....	.....	.....	.....	.....	.....	25625	147525	21180	309144	10250	39,236 97
41300	.....	.....	384900	31170	.....	25222	52300	.....	67565	.....	26,725 47
62730	.....	.....	1462560	79760	.....	24640	55800	.....	332000	.....	82,534 80
47552	.....	.....	1988000	61170	380	30538	112976	.....	262480	.....	102,372 64
152225	.....	.....	1300000	85620	.....	3300	560670	1272	51311	67220	101,166 23
33257	200	.....	294900	83660	660	8110	81464	34353	89582	36700	29,601 67
.....	.....	.....	.....	21000	.....	.....	.....	.....	.....	1500	1,305 00
6650	.....	267	30550	2000	800	3725	22700	7300	45000	9600	6,485 00
6050	.....	.....	15000	3050	.....	400	2500	175	11800	.....	1,778 75
110	50	.....	13500	20200	.....	1000	6250	.....	18000	.....	2,678 30
349874	250	267	5489410	387630	1840	96935	894660	43100	877738	115020	354,647 86

RETURN of the Number and Value of Vessels, Boats and

DISTRICTS.	VESSELS AND BOATS EMPLOYED.						FISHING MATERIALS.						
	Vessels.				Boats.			Gill Nets.		Seines.		Pound Nets.	
	No.	Tonnage.	Value.	Men.	No.	Value.	Men.	Fathoms.	Value.	Fathoms.	Value.	No.	Value.
<i>Lake Ontario (including Niagara Division).</i>			\$			\$			\$		\$		\$
Niagara River.....					17	980	32	9200	1310	675	375	*3	600
Port Dalhousie and Jordan.....					5	1565	11	7200	875	25	25		
Beamsville.....					10	350	18	6600	775	100	50		
Grimsby and Winona.....					2	300	6	7000	600				
Burlington Beach.....					22	1420	40	19900	2550	600	400		
Bronte.....					15	2100	50	43500	4800				
Port Credit to Port Union.....					11	1525	17	3500	2000	557	400		
Pickering Harbour.....					3	600	8	2000	2200				
Brighton.....					5	87	10	1000	100				
Cobourg.....					5	285	10	2500	575	90	50		
Port Hope.....					2	230	3	2000	200	75	50		
Newcastle.....					1	30	2	500	75				
Bowmanville.....					4	75	8	1000	100	135	95		
Murray Township.....					1	20	2			90	50		
Rice Lake and tributaries.....													
Trent River.....													
Totals.....					103	9567	217	105900	16160	2347	1495	3	600
<i>Prince Edward County and Bay of Quinté Division.</i>													
Wellington Beach, Weller's Beach and Smith's Bay.....	4	100	8500	15	50	1000	90	5000	3500	10000	400	....	....
Bay of Quinté, from Carrying Place to Mill Point.....					67	1250	206	4126	490	3165	2970	....	....
Totals.....	4	100	8500	15	117	2250	296	9126	3990	13165	3370	....	....

\* Machines.



Fishing Materials, &c., Province of Ontario—Continued.

		KINDS OF FISH.													
Hoop-Nets.														VALUE.	
No.	Value.	Whitefish, brls.	Whitefish, lbs.	Trout, lbs.	Herring, brls.	Herring, fresh, lbs.	Eels, lbs.	Sturgeon, lbs.	Maskinongé, lbs.	Bass, lbs.	Pickarel, lbs.	Pike, lbs.	Coarse Fish, lbs.	\$	cts.
	\$				124	174500	100	28400		500	15300	1100	177200	15,414	00
			100	100		114700	200	200			3100		26000	5,565	00
						73000				700	1000	2100	15700	3,588	00
			3000	8500		27000								2,170	00
			1300	2000		163900	500	300				1000		6,958	00
				2000		999000	400			600		1000	10800	40,594	00
			13100	350	210	86600	2220			200	1000	3500	41000	7,092	20
						200000								8,000	00
6	90			3000								16000	22000	1,760	00
				4000								22000	26000	2,280	00
			900	1400		4600	100					500	20300	1,036	00
				2000									1000	230	00
			500			200						3000		198	00
										600	1050	1200	2000	208	50
									150000	100000				15,000	00
				2000			8000	1000	48100	50000	30000	25000	40000	10,576	00
6	90		18900	25350	334	1843500	11520	29900	198100	152600	51450	76400	382000	120,669	70
90	2000		260000	140000	100	40000	10000					100000	300000	51,450	00
77	2895	88	71530		257	243800	3285	760	1770	3000	18550	25330	197500	26,158	80
167	4895	88	331530	140000	357	283800	13285	760	1770	3000	18550	125330	497500	77,608	80

RETURN of the Number and Value of Vessels, Boats and

NAME OF STATION.	VESSELS AND BOATS EMPLOYED.			FISHING MATERIALS.					
	Boats.			Gill Nets.		Seines.		Hoop Nets.	
	No.	Value.	Men.	Fathoms.	Value.	Fathoms.	Value.	No.	Value.
<i>Lennox, Addington and Frontenac Divisions.</i>									
Lake coast, fronting on Lennox and Addington, including—									
Napanee River.....	43	793	77	9385	1190	60	65	32	700
Amherst Island.....	24	360	48	9760	900				
Inland waters, County of Frontenac.....								5	50
Totals.....	67	1153	125	19145	2090	60	65	37	750
<i>Wolfe Island and Kingston Division.</i>									
Big Bay.....	1	35	2					4	100
Wolfe Island.....	1	20	2	275	50			4	100
From Amherst Island to Pitt's Ferry.....	8	280	13	991	360			10	80
Howe Island.....	6	126	6	1594	120			2	80
Gananoque.....									
Totals.....	16	461	23	2860	530			20	360
<i>Rockport, Brockville and Cornwall Division.</i>									
St. Lawrence River, from Rockport to Glengarry Co. line.....								102	1200
<i>Prescott, Russell and Carleton Counties Division.</i>									
Ottawa River, fronting on these counties and inland waters.....									

\* Estimated.

Fishing Materials, &c., in the Province of **Ontario**, &c.—*Continued.*

KINDS OF FISH.												VALUE.
Whitefish, lbs.	Trout, lbs.	Herring, barrels.	Herring, fresh, lbs.	Eels, lbs.	Sturgeon, lbs.	Maskinongé, lbs.	Bass, lbs.	Pickarel, lbs.	Pike, lbs.	Coarse Fish, lbs.	Home Consumption, lbs.	
												\$ cts.
110000 .....		10 .....						29800	27400	57550		13,431 50
125000 .....	6000 .....		6000 .....				6500	30000	8000			13,130 00
.....	13300 .....		3700 .....				6700	1600	2000	10100		2,363 00
235000	19300	10	9700				13200	61400	37400	67650		28,924 50
				800					1500	5000		273 00
				500					700	3000		155 00
				180					11200	14000		990 80
				200	750	40	900	115	3370	900		314 65
				2000	5100	1500	4200		6200	6000	*	1,258 00
				3680	5850	1540	5100	115	22970	28900		2,991 45
				9400	3500	2125	23350	7450	48900	47870		6,556 10
400 .....				5360	5070	12050	7250	7400	13125	53050		4,436 55



RETURN of the Number and Value of Vessels, Boats

NAME OF STATION.	VESSELS AND BOATS EMPLOYED.							FISHING MATERIALS.			
	Vessels.				Boats.			Gill Nets.		Hoop Nets.	
	No.	Tonnage.	Value.	Men.	No.	Value	Men.	Fathoms.	Value.	No.	Value.
<i>Leeds and Lanark Division.</i>			\$			\$			\$		\$
Charleston Lake.....										13	130
Beverly Lakes.....										8	200
Lansdowne.....										5	100
Gananoque Lake.....										18	495
Rideau and neighbouring Lakes.....										2	40
River Tay and tributaries ..											
Totals. . . . .										46	965
<i>Renfrew County Division.</i>											
Ottawa River, fronting on county, including inland waters.....											
<i>Lake Nipissing Division</i> .....					9	276	16	3,560	340		
<i>Parry Sound and Muskoka Division</i> .....											
<i>Wellington County, inland waters, including River Credit Division</i> .....											
<i>Lake Simcoe Division</i> .....											
<i>Lake and River Scugog Division</i> .....											
<i>Victoria County Division</i> ..											
<i>Peterboro' County Division</i> .....											

\*Estimated.

and Fishing Materials, &c.—Ontario—Continued.

KINDS OF FISH.										VALUE.
Whitefish, lbs.	Trout, lbs.	Herring, fresh, lbs.	Eels, lbs.	Sturgeon, lbs.	Maskinongé, lbs.	Bass, lbs.	Pickarel, lbs.	Pike, lbs.	Coarse Fish, lbs.	
										\$ cts.
	4,000					2,000		1,000	2,000	630 00
	3,000		200			12,000		4,500	17,100	1,770 00
									10,000	300 00
			300		1,700	825	600	2,800	12,860	385 80
		1,000				800	1,000	800	40,820	1,564 10
									2,000	238 00
	7,000	1,000	500		1,700	15,625	1,600	9,100	84,780	4,887 90
2,070	4,525	300	2,250	4,600	2,800	4,700	19,800	9,300	11,150	3,280 60
3,900		6,600			10,100	1,800	10,587	36,000	1,000	3,649 35
	30,900				500	3,450	3,350	1,000	14,000	3,964 50
	46,000		2,000			4,000		1,000	8,000	5,250 00
	28,000	10,000		28,000		45,000	7,000	53,000	23,000	11,270 00
			3,500		245,000	98,000			*150,000	25,290 00
	1,000	5,000	1,000		35,000	20,000	4,500		*6,200	4,071 00
	18,000	300	500		131,000	107,000			8,000	16,362 00





NAME OF DIVISIONS.	KINDS OF FISH.														VALUE.
	Whitefish, barrels.	Whitefish, lbs.	Trout, lbs.	Trout, barrels.	Herring, barrels.	Herring, fresh, lbs.	Eels, lbs.	Sturgeon, lbs.	Maskegon, lbs.	Bas, lbs.	Pickrel, lbs.	Pike, lbs.	Coarse Fish, lbs.	Home Consump- tion, lbs.	\$ cts.
Lake Superior Division.....	305	905465	767300	1550	.....	30000	....	43060	....	.....	71536	3000	.....	80000	177,681 60
Lake Huron Division, including Manitoulin and Georgian Bay Division .....	1668	4171180	4311760	1623	2550	446040	...	328220	10640	24710	686400	101313	118435	791230	915,610 80
Lake St. Clair Division, including tributaries.		55525	50000		707	107000	...	44985	1330	25625	147525	21180	309144	10250	39,236 97
Lake Erie Division.....		349874	250		267	5489410		387630	1840	96935	894660	43100	877738	115020	354,047 86
Lake Ontario Division, including Niagara District.....		18900	25350		334	1843500	11520	29900	198100	152600	51450	76400	382000	.....	120,669 70
Prince Edward County and Bay of Quinte Division.....	88	331530	140000		357	283800	13285	760	1770	3000	18550	125330	497500	.....	77,608 80
Lennox, Addington and Frontenac Division .....		235000	19300		10	9700				13200	61400	37400	67650	.....	28,924 50
Wolfe Island and Kingston Division.....							3680	5850	1540	5100	115	22970	28900	.....	2,991 45
Rockport, Brockville and Cornwall Division							9400	3500	2125	23350	7450	48900	47870	.....	6,556 10
Prescott, Russell and Carleton Counties Division		400					5360	5070	12050	7250	7400	13125	53150	.....	4,436 55
Leeds and Lanark Division.....			7000			1000	500		1700	15625	1500	9100	84780	.....	4,887 90
Renfrew County do .....		2070	4525			300	2250	4600	2800	4700	19800	9300	11150	.....	3,280 60
Lake Nipissing do .....		3900				6000			10100	1800	10587	36000	1000	.....	3,649 35
Parry Sound and Muskoka Division.....			30900						500	3450	3350	1000	14000	.....	3,964 50
Wellington County, including River Credit Division.....			46000				2000			4000		1000	8000	.....	5,250 00
Lake Simcoe Division.....			28000			10000		28000		45000	7000	53000	23000	.....	11,270 00
Lake and River Scugog Division.....							3500		245000	98000			150000	.....	25,290 00
Victoria County Division.....			1000			5000	1000		35000	20000	4500		6200	.....	4,071 00
Peterboro' do .....			18000			300	500		131000	107000			8000	.....	16,362 00
Totals.....	2061	6073844	5449385	3173	4225	8233250	52995	382475	655495	651345	1993323	602118	2688517	996500	1,806,389 68

## RECAPITULATION

Of the Yield and Value of the Fisheries in the Province of **Ontario** during the Year 1891.

Kinds of Fish.	Quantity.	Price.		Value.	
		\$ cts.		\$ cts.	
Whitefish .....	Brls. 2,061	10	00	20,610	00
do .....	Lbs. 6,073,844	0	08	485,907	52
Trout .....	" 5,449,385	0	10	544,938	50
do .....	Brls. 3,173	10	00	31,730	00
Herring .....	" 4,225	4	50	19,012	50
do .....	Lbs. 8,233,250	0	04	329,330	00
Eels .....	" 52,995	0	06	3,179	70
Sturgeon .....	" 882,475	0	06	52,948	50
Maskinongé .....	" 655,495	0	06	39,329	70
Bass .....	" 651,345	0	06	39,080	70
Pickereel .....	" 1,993,323	0	05	99,666	15
Pike .....	" 602,118	0	05	30,105	90
Coarse fish .....	" 2,688,517	0	03	80,655	51
Home consumption .....	" 996,500	0	03	29,895	00
Total for 1891 .....				1,806,389	68
do 1890 .....				2,009,637	37
Decrease .....				203,247	69

STATEMENT showing the Number of Vessels, Tugs and Boats, &c., in **Ontario**, for the Year 1891.

Articles.	Value.
	\$
58 tugs or vessels (tonnage 1,444) .....	125,950
1,145 boats .....	108,832
1,414,351 fathoms of nets .....	224,775
27,344 do seines .....	16,530
387 pound nets .....	99,700
380 hoop nets .....	8,380
Total number of men employed, 2,920 .....	584,167







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PART II.

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REPORT

ON

FISH-BREEDING OPERATIONS

IN THE

DOMINION OF CANADA

1891.

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FISH-BREEDING REPORT.

SUPERINTENDENT'S REPORT ON FISH-BREEDING OPERATIONS, 1891.

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## REPORT

OF

MR. SAMUEL WILMOT

*Superintendent of Fish Culture for the Dominion of Canada*

FOR THE YEAR 1891.

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The Honourable

CHARLES H. TUPPER,

Minister of Marine and Fisheries,  
Ottawa.

The following report, with the appendices, will give full particulars of the operations connected with fish culture and the artificial breeding of fish as now carried on throughout the several provinces of the Dominion.

This industry has now reached a somewhat conspicuous position under your Department of Fisheries, extending its sphere of work from the Atlantic to the Pacific Oceans, by having permanently constructed in each of the provinces excepting Manitoba several commodious fish hatcheries, now numbering thirteen, all of which are supplied with the latest and most approved fish-breeding apparatus known or used by scientific and practical fish-culturists of the present day.

### MANITOBA HATCHERY.

Whilst the Province of Manitoba is mentioned as the exceptional one without a hatchery it will only remain so for a short time, as arrangements are now being made to construct an extensive fish-breeding establishment at Selkirk on the Red River, near the foot of Lake Winnipeg. This nursery will be more particularly intended for the propagation of whitefish with the view to foster the supply of this most valuable fish, which in a measure, from excessive fishing on the part of large fishing and trading companies, has in some portion of Lake Winnipeg shown signs of depletion.

This Selkirk nursery will not be exclusively used for whitefish breeding, but for other commercial fishes also, such as salmon trout and lake trout, and other species, it may be found advisable to breed and distribute throughout the lakes and rivers of Manitoba and the North-West Territories.

### WORK AT HATCHERIES GENERALLY.

Taking the work as a whole during 1891, the operations may be said to be of a very satisfactory character. Aquaculture is not unlike its sister industry, agriculture, being subject to variations of many kinds; the elements act adversely at times for the husbandman to satisfactorily secure and house his crops produced from the land; and so it is with the fish-culturist in capturing his stock of parent fish and collecting his supplies of ova to fill his hatchery with eggs from the water. Inclemency of weather, causing storms and freshets, which operate seriously against the working of nets; frequently, too, at the very time when the parent fish ought to



be taken and are best fitted for the use of the nurseries, drawbacks of this nature have been experienced at some of the points where the work of fish-egg gathering has been conducted during the past season; and consequently the supplies of ova have in a measure been somewhat lessened at these places.

During the past year there were two new hatcheries erected—the one for breeding sea salmon at Tadoussac, on the Saguenay, in the Province of Quebec; the other for breeding lobsters (the first of its kind) at Bay View, near Pictou, in the Province of Nova Scotia.

The salmon hatchery at Tadoussac was built to replace the former one, which from the long time it had been in operation—and being an old building when first purchased for fish-breeding purposes—had become so decayed as to make it unsafe either as a building or suitable to accommodate the desired number of ova required to supply the Saguenay district with fry. Therefore, the present large and commodious one was built. Its location for economic working, and for certainty and safety in procuring a full supply of water from the small lake adjacent to it, far exceeds that of the old site. A principal object gained is in obtaining the water supply by laying an underground iron pipe for a short distance, which taps the lake direct; whereas previously the water supply for the old nursery, after leaving this lake, was conducted through three separate expensively-built ponds and dams, then through a long wooden raceway or dale on the surface of the rocky formation—all of which cost a good deal annually to keep in repair, with a liability also at any time for the dams to break away, and for the dale to freeze up.

#### BAY VIEW LOBSTER HATCHERY.

The lobster hatchery referred to, with its surroundings, includes the building proper, which is some 75 feet long by 35 feet broad, with a breeding apparatus inside to accommodate about ninety millions of ova; a steam 20 horse-power boiler, and duplex pump for drawing the salt water into the hatchery from the bay alongside; and a wharf or pier extending out to 20 feet depth of water in the bay, built to accommodate tugs or other vessels which may be required to collect and deliver lobster eggs from the neighbouring canning factories; and also to distribute the lobster fry, when hatched, throughout that immediate portion of the Northumberland Straits.

The period in which lobster breeding was carried on at this hatchery was very short, only some 15 days, occasioned by the lateness of getting the building and machinery in readiness for work. Your superintendent planned and conducted the operations, calling to his assistance Mr. Parker, from the Sandwich hatchery in Ontario, whose experience in the working of the automatic glass incubators was found to be most valuable. Mr. Alfred Ogden was appointed officer in charge of this institution after Mr. Parker left. Special reports on this subject from both of these officers will be found in the appendices annexed.

It may be briefly stated here that this lobster hatchery and its perfectly novel appliances, with its *modus operandi* of hatching the lobster ova, is the first of its kind on this continent, and whilst the venture, and the method of its application, were both original and untried before, the success attending this first and very short season's operations proved to be most satisfactory.

Whilst no difficulties of any moment were experienced in the actual hatching out of the young lobsters from the eggs, which were properly collected and placed in the automatic jars, nor in the safe-keeping and distributing of the fry afterwards, yet to ensure more successful results when operations are to be conducted on a more extensive scale in future years, some systematic method must be adopted for properly procuring the increased supplies of ova necessary for the wants of this hatchery.

As the great difficulty lies in a careful collection of the ova from the body of the lobster at the proper stages of their ripeness, and as the distances of the canning

factories are somewhat far apart, it will be found imperatively necessary that experts, or some persons practically acquainted with the nature of the female lobster, should be placed at each of the factories, whose duty should be to closely examine the lobsters as they are brought in by the fishermen, and select such of them whose eggs are at the proper stage of ripeness, for transmission to the hatchery. It will be perfectly useless ever to anticipate any successful results at the nursery by allowing the fishermen or factory hands to gather these eggs from the female lobster. They have their own business to attend to, and are quite careless as to how the work should be done, either as to the careful mode requisite for taking the eggs from the body of the fish, or of the state of ripeness in which the eggs should be when so taken. The experience of the past season fully demonstrates this, as millions upon millions of the ova taken in this manner at the outlying factories, and sent to the hatchery, proved to be perfectly useless, entailing upon the employees of the hatchery great loss of time and expense in attending to and carefully watching and handling these eggs in the automatic jars, only to become a mixed mass of dead matter.

Sufficient lobster eggs were laid in the jars at the Bay View hatchery, if they had been properly collected at the several outside factories, to have turned out some seventy or eighty millions of young lobsters; and the consequence was that only some seven millions of lobster fry were put out, and four-fifths of these were bred from the eggs collected by the immediate employees of the hatchery, from Messrs. Burnham & Morrel's canning factory, situated about a stone's throw from the hatchery, whose officers rendered important aid in the careful gathering of these eggs.

#### CARLETON SALMON POND.

Another enterprise in the line of artificial fish culture has been initiated during the past year in the capturing and impounding of parent salmon from which to obtain supplies of ova for the St. John River hatchery, New Brunswick. This institution has laboured under adverse circumstances almost from its first construction at Rapide des Femmes, on the St. John River, on account of the almost hopeless efforts to procure parent salmon in the St. John River, or its tributaries, in the vicinity of the hatchery. The slaughter in killing the salmon by spear and other illegal ways in the upper portions of the St. John River had so reduced the number of fish as to make it next to impossible to capture sufficient supplies of salmon or to make it worth while to continue this mode of securing eggs for the hatchery. Recourse was consequently made to transfer small quotas of salmon eggs from some of the other Maritime Province hatcheries, and of salmon trout and whitefish ova from the Ontario hatcheries.

At last the Carleton pond venture, which had been spoken of for many years past, was practically commenced during the past year. The Carleton pond, or present salmon reservoir, is a somewhat extensive fluctuating body of water, situated on the Carleton side of the harbour, at the city of St. John, in New Brunswick. Its surface area is increased and diminished by the action of the tide which ebbs and flows into it through a narrow bridge-like entrance, which at high water covers some 6 or 8 acres of surface, and at low water a large hole or basin some 15 feet in depth is left of about  $\frac{1}{4}$  of an acre, the surface of this hole can be regulated at pleasure by moveable gates at the bridge or entrance of the tide way.

Doubts were entertained by many that this pond would be unsuitable for the retaining of salmon in it, by reason of the sewage and other matter running into it from the buildings surrounding the pond, that the salmon on this account would become unhealthy and die. This theory was fully exploded from the fact that upwards of 300 adult salmon caught in the nets in the harbour outside during June and July were placed in this pond and kept till the spawning time in November in the most sound and healthy condition. No deaths whatever occurred from disease



of any kind; the only loss was from a few odd fish having got injured in their capture in the nets, and afterwards getting too closely pressed by the tide against the iron bars of the gate. The eggs were taken from these fish in the most healthy condition and conveyed up the St. John River to the Rapide des Femmes hatchery. Full particulars of the capture of these fish, their safe retention in the pond and of the collection of their eggs will be found in the report of officers McClusky and O'Brien in appendices hereto attached.

### FRY DISTRIBUTED AND EGGS COLLECTED IN 1891.

There will now be submitted in this report the following particulars, namely:—

(1.) A general statement of the output of fry of all kinds bred at the several fish hatcheries of the Dominion during the year, showing the numbers of each kind and their species, making a grand total of 115,771,800.

(2.) A statement in tabulated form showing the number and species of young fish and semi-hatched eggs that were distributed from and received at each of the several hatcheries in Canada during the season of 1891.

(3.) A schedule of the quantities of the different descriptions of fish eggs collected and deposited in each hatchery in the Dominion during the past year, the whole number amounting to 127,973,500.

(4.) A tabulated statement showing the gross numbers of young fish of all kinds which have been turned out of each hatchery into the waters of Canada from the commencement of operations at each nursery up to the present time, making in the gross an exhibit of 911,529,700 of fry, comprising the higher orders of fish, and best adapted for the commercial and domestic wants of the country.

(5.) A general summary of the individual transactions at each of the hatcheries during the year 1891, in which a brief account will be given of the work done, the number of eggs laid down, the fry turned out, and the repairs required at each establishment, together with general remarks relating to those hatcheries.

### TABULATED STATEMENTS.

#### 1.—GENERAL STATEMENT OF THE OUTPUT OF FRY OF ALL KINDS FROM THE SEVERAL HATCHERIES DURING 1891.

The total distribution of young fish in the various waters of Canada from the individual hatcheries in 1891 was 115,771,800, of the following described species:—

Atlantic salmon ( <i>Salmo Salar</i> ).....	6,133,000
Pacific salmon ( <i>Sockeye Oncorhynchus nerka</i> ).....	3,603,300
Salmon trout, great lakes ( <i>Naymacush</i> ).....	9,990,000
Speckled or brook trout ( <i>Fontinalis</i> ).....	440,500
Whitefish, of the great lakes ( <i>Corigoni</i> ).....	73,605,000
Pickarel, doré, wall-eyed pike ( <i>Luciopercha</i> ).....	15,000,000
Lobster fry ( <i>Homarus</i> ).....	7,000,000

Grand total, 1891.....115,771,800



2.—A tabulated form in which is shown in separate columns the number, and name of each hatchery, the quantities of fry put out from each, the numbers of semi-hatched eggs sent from, and received at, the hatcheries, and the particular species of fry and eggs so distributed :—

## SCHEDULE AS DESCRIBED.

Number.	Name of Hatchery.	Number of Fry put out.	Number of semi-hatched Eggs sent to other Hatcheries.	Number of semi-hatched Eggs received from other Hatcheries.	Description of Fish.
1	Fraser River, B.C. ....	3,603,300			Salmon "sockeye."
2	Sydney, N.S. ....	1,000,000			do "salar."
3	Bedford, N.S. ....	300,000			do do
	do ....	250,000		750,000	Salmon trout.
	do ....	2,000,000		2,500,000	Whitefish.
4	Dunk River, P.E.I. ....	Not in	operation		
5	St. John River, N.B. ....	2,000,000		2,500,000	Whitefish.
	do ....	1,165,000		1,500,000	Salmon trout.
6	Miramichi, N.B. ....	783,000			do "salar."
	do ....	720,000		750,000	do trout.
7	Restigouche, Que. ....	1,750,000			do "salar."
8	Gaspé, Que. ....	1,000,000			do do
9	Tadoussac, Que. ....	1,300,000			do do
10	Magog, Que. ....	1,725,000		2,500,000	do trout.
	do ....	1,325,000		2,500,000	Whitefish.
11	Newcastle, Ont. ....	4,750,000	7,000,000		Salmon trout.
	do ....	2,700,000		2,500,000	Whitefish.
	do ....	357,500	110,000		Speckled trout.
12	Sandwich, Ont. ....	60,000,000	16,000,000		Whitefish.
	do ....	15,000,000			Pickarel.
13	Ottawa, Ont. ....	5,580,000		6,000,000	Whitefish.
	do ....	1,380,000		1,500,000	Salmon trout.
	do ....	83,000		110,000	Speckled trout.
14	Bay View, N.S. ....	7,000,000			Lobsters.
	Totals. ....	115,771,800	23,110,000	23,110,000	

## FISH EGGS COLLECTED AND PLACED IN THE HATCHERIES IN 1891.

The following table will show the numbers and descriptions of fish ova collected and put in the troughs and incubators of the individual hatcheries throughout the Dominion in 1891. The Magog and Ottawa hatcheries are supplied at the proper season of the year with their quota of impregnated eggs from the Newcastle and Sandwich nurseries in Ontario. The total number of eggs collected, as shown below, amounted to 127,973,500.

No.	Hatchery.	Province.	No. of Eggs.	Species.
1	Fraser River.....	British Columbia .....	6,485,500	Salmon "sockeye."
2	Sydney, C.B.....	Nova Scotia .....	1,500,000	do "salar."
3	Bedford .....	do .....	600,000	do do
4	Dunk River .....	Prince Edward Island .....		Not in operation.
5	St. John River.....	New Brunswick.....	1,600,000	Salmon "salar."
6	Miramichi.....	do .....	1,625,000	do
7	Restigouche .....	Quebec.....	1,416,000	do
8	Gaspé.....	do .....	1,002,000	do
9	Tadoussac .....	do .....	1,800,000	do
10	*Magog .....	do .....		
11	Newcastle .....	Ontario .....	5,445,000	Salmon trout.
	do .....	do .....	500,000	Brook trout.
	do .....	do .....	3,000,000	Whitefish.
12	Sandwich.....	do .....	75,000,000	do
	do .....	do .....	19,000,000	Pickarel, doré.
13	*Ottawa.....	do .....		
14	Bay View .....	Nova Scotia .....	9,000,000	Lobster eggs.
	Total eggs, 1891.....		127,973,500	

NOTE.—Hatcheries thus \* will obtain their supplies of semi-hatched eggs from the Newcastle and Sandwich establishments during January and February next.

## GRAND TOTAL OF YOUNG FISH OF ALL KINDS PUT OUT OF THE SEVERAL CANADIAN FISH HATCHERIES FROM THE ORIGIN OF THE INDUSTRY UP TO THE PRESENT TIME, 1890.

The following schedule shows the gross output of fry of all kinds, from each hatchery in each province, the name of the hatchery, the province where located, the year in which they were each established, exhibiting a total number of fry of all species amounting to 917,529,700:—

STATEMENT showing the Places where, and the Years in which the several Fish Hatcheries have been erected; also the number of Fry distributed from each Establishment, annually, since they were built.

YEAR.	ONTARIO.			QUEBEC.			NEW BRUNSWICK.		NOVA SCOTIA.			PRINCE EDWARD ISLAND.	BRITISH COLUMBIA.	TOTALS.
	Newcastle.	Sandwich.	Ottawa.	Magog.	Tadoussac.	Gaspé.	Restigouche.	Miramichi.	St. John River.	Bedford.	Sydney.	Bay View. * Lobster Hatchery.	Dunk River.	
1868-73	Fry. 1,070,000													Fry. 1,070,000
1874	350,000						100,000	60,000						510,000
1875	650,000				60,000	110,000	600,000	150,000						1,570,000
1876	700,000	8,000,000			150,000	50,000	300,000	60,000		395,000				9,655,000
1877	1,300,000	8,000,000			1,180,000	1,051,000	600,000	320,000		1,000,000				13,451,000
1878	2,065,000	20,000,000			707,000	630,000	1,015,000	665,000		1,400,000				27,042,000
1879	2,602,700	12,000,000			1,250,000	1,397,000	1,470,000	1,025,000	170,600	730,000				21,684,700
1880	1,923,000	13,500,000			1,135,000	730,000	1,500,000	805,000	50,000	680,000				21,013,600
1881	3,300,000	16,000,000		200,000	334,000	500,000	740,000	770,000	588,000	850,000			375,000	22,949,000
1882	4,841,000	44,000,000		975,000	600,000	530,000	1,400,000	640,000	850,000	850,000	315,000		1,000,000	55,790,000
1883	6,053,000	72,000,000		250,000	995,000	520,000	300,000	925,000	72,600	800,000	639,000		1,210,000	83,784,600
1884	8,800,000	37,000,000		100,000	985,000	893,000	940,000	795,000	811,000	1,000,000	853,000		1,000,000	53,143,000
1885	5,700,000	68,000,000		300,000	720,000	290,000	600,000	900,000	153,000	960,000	772,000		1,000,000	81,067,000
1886	6,451,000	57,000,000		1,400,000	1,627,000	576,000	1,380,000	945,000	2,181,000	960,000	1,179,000		400,000	76,724,000
1887	5,130,000	56,500,000		675,000	900,000	630,000	1,500,000	900,000	2,479,000	4,230,000	1,415,000		500,000	79,273,000
1888	8,076,000	56,000,000		3,475,000	850,000	800,000	1,720,000	1,230,000	4,390,000	4,390,000	1,539,000		5,807,000	88,109,000
1889	5,846,500	21,000,000		2,800,000	1,600,000	430,000	1,280,000	830,000	3,570,000	3,850,000	2,034,500		8,419,000	98,700,000
1890	7,736,000	52,000,000	5,733,000	2,875,000	1,700,000	806,000	2,346,000	1,022,000	3,492,000	3,840,000	1,953,000		6,640,000	90,213,000
1891	7,807,500	75,000,000	7,043,000	3,050,000	1,300,000	1,000,000	1,750,000	1,503,000	3,165,000	2,550,000	1,000,000	7,000,000		3,603,300
TOTALS	80,941,500	616,000	12,776,000	16,100,000	16,118,000	11,149,000	19,651,000	13,625,000	20,867,200	20,105,000	11,739,500	7,000,000	6,145,000	29,308,300
The particular descriptions of fry above enumerated were as follows:—														
<i>Schnouide</i> —Atlantic and Pacific salmon, salmon trout of the great lakes, and speckled trout of the streams														
do <i>Whitchish (Corrigonus)</i> of the great lake region														
<i>Percide</i> —Pickarel, or doré ( <i>Lucioperca</i> )														
Lobster fry ( <i>Homarus Americanus</i> )														
Grand totals of all kinds														
911,529,700														

The particular descriptions of fry above enumerated were as follows:—

<i>Salmoide</i> —Atlantic and Pacific salmon, salmon trout of the great lakes, and speckled trout of the streams	221,933,800
do Whitefish ( <i>Coregonus</i> ) of the great lake region	451,380,000
<i>Percide</i> —Pickerel, or doré ( <i>Lucioperca</i> )	231,215,900
Lobster fry ( <i>Homarus Americanus</i> )	7,000,000
Grand totals of all kinds	911,529,700

NOTE.—In addition to the written 80,941,500 fry distributed from this parent establishment at Newcastle, there are annually transferred from this institution to the Eastern Province hatcheries large numbers of semi-hatched ova of various kinds.  
In like manner the Sandwich nursery transfers annually large quantities of eyed eggs to other hatcheries, exclusive of the 616,000,000 of fry shown above.  
\*The hatchery at Bay View, N.S., is devoted wholly to lobster hatching. The institution was only completed in time for a few days work in 1891.



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5.—SUMMARY OF OPERATIONS AT EACH OF THE HATCHERIES IN 1891.

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## 1.—FRASER RIVER HATCHERY, BRITISH COLUMBIA.

From this hatchery there were bred during the season of 1891, 3,603,500 "Nerka" or Sockeye salmon fry. They were planted in Harrison River, Coquitlam River, Nicomikl River, Silver Creek, Chiliwack Rapids, and other points, in good condition. The capturing of parent salmon was commenced in October at Morris Creek, a branch of the Harrison River. On the 5th of October the first lot of eggs were gathered and sent to the hatchery. On the 20th October the last consignment was forwarded to the nursery, making in the whole 6,485,500 ova, which were considered sufficient for the breeding capacity of the establishment. It was found impossible to keep a record of the number of parent salmon stripped. None of the "Quinnat" species were obtained. The "Nerka" or Sockeye salmon being most highly prized for commercial purposes, are almost wholly bred at the Fraser River hatchery.

The contemplated building of a more extensive hatchery at Morris Creek, and the construction of a large reservoir or trap on this stream, into which the salmon on their upward migration would enter, and become impounded, were not carried out this year. The officer in charge advises the continuance of the use of the present hatchery at New Westminster for another season, but that a new site be selected, and necessary enlarged buildings and appliances be constructed and completed for operation in 1893, as the present one is inadequate to accommodate sufficient ova to fill the wants for giving increased supplies of young salmon to the numerous rivers requiring them.

Many repairs to the present building, together with a new outfit of hatching troughs, will be required; therefore a complete new establishment on a larger scale would be on the line of general economy for fish-breeding purposes in British Columbia.

## 2.—SYDNEY HATCHERY, C. B., NOVA SCOTIA.

At this establishment about 1,055,000 salmon fry were planted in the principal waters of the within-named counties, Cape Breton, Victoria, Inverness, Richmond and Cape Breton, and also in certain creeks and ponds. They were reported to be put out in the best condition. The number of parent salmon captured in the fall of 1891 amounted to 345, from which were gathered 1,200,000 eggs. These fish were obtained principally in Middle River and Sydney River; scarcely any were taken from the Margaree River, where in former years the principal supply was got. This was occasioned by an effort on the part of the fishermen not to comply with the arrangements previously made.

The officer reports salmon were never taken in larger quantities before than during the past year in the Sydney River and the Bras d'Or lakes. The appliances for taking them, also, were of a very rude description, as the salmon fisheries there had almost become extinct. The hatchery was painted outside and inside; the buildings and grounds are reported in good condition and will compare favourably with other hatcheries in the Dominion.

## 3.—BEDFORD HATCHERY, PROVINCE OF NOVA SCOTIA.

During the past season upwards of three and a half millions of eggs of all kinds were obtained for this nursery. Of these, 400,000 were eggs of the sea salmon; the remainder were salmon trout and whitefish, which were transferred from the Newcastle and Sandwich hatcheries in Ontario. The several kinds of fry that were hatched were distributed in the waters of the counties of Halifax, Cumberland, Pictou, Annapolis, and other localities in the province. A departure was made from the former system of capturing parent salmon in the Musquodoboit and other rivers to a concentration of the work on certain streams which enter the Merigo-

ish Bay near Pictou. This venture was a new one, and did not prove as successful as expected, on account of the lateness of the season when the work was commenced, when only 77 salmon were secured, principally on the French River. It is proposed, another year, to purchase supplies of salmon from the fishermen along the coast, or let the officers of the hatchery net them and keep them in the salt-water cove near by, which has been fitted up for the purpose. By such measures it is confidently expected that full supplies of salmon eggs will be obtained for the Bedford hatchery to stock the Nova Scotia rivers with fry in the future. From the 77 salmon above-mentioned, 600,000 eggs were procured and forwarded to the Bedford hatchery. These, from last accounts, were doing well. Further supplies of salmon trout and whitefish eggs will be transferred from the Ontario nurseries to Bedford at the proper time as in former years.

#### 4.—DUNK RIVER HATCHERY, PROVINCE OF PRINCE EDWARD ISLAND.

The dam and buildings at this place were destroyed, and no reconstruction of them has yet taken place.

#### 5.—ST. JOHN RIVER HATCHERY, PROVINCE OF NEW BRUNSWICK.

The former efforts for capturing parent salmon on the Tobique River having been abandoned, the long-projected plan of getting them from fishermen at the St. John harbour was satisfactorily accomplished. The Carleton mill pond, situated alongside the harbour, was fitted up as a reservoir, in which some 300 salmon were safely impounded till the spawning time, when 1,600,000 eggs were collected and conveyed by railway to the St. John hatchery at Rapide des Femmes. Much credit is due to officer Joseph O'Brien for the success which attended the catching and conveying of the salmon to the pond and their safe-keeping in it. There were hatched in this hatchery last season 2,000,000 whitefish and 1,165,000 salmon trout fry. These were put in some 15 of the lakes in several of the counties of the province. Reports give a decided increase of fish in the waters where fry have been planted from this nursery. Salmon were seen in large numbers in the Salmon River, in which fry were planted during the past year. A notable increase from similar planting of fry in the Tobique has been shown in making it a resort for salmon anglers, some of whose scores reached some 57 salmon, others taking less, circumstances not known previous to the stocking of the river with artificially-bred fry. Further reports show that salmon trout and whitefish were caught in waters in the province where they were never known before the planting of the young fish in them from the hatchery. The establishment throughout is in good order. The painting authorized last season was not done, being deferred till the next year. The supply pond for the hatchery will require some repairs. A fence is also required around the property.

#### 6.—MIRAMICHI HATCHERY, PROVINCE OF NEW BRUNSWICK.

The number of salmon fry put out of this hatchery into the Miramichi and its branches amounted to 783,000, which were distributed in good healthy condition. In addition, and as a new undertaking, there were some 720,000 salmon trout fry bred and put out of this nursery into the Miramichi waters. These were produced from the semi-hatched eggs obtained from the Newcastle hatchery in Ontario. There were also some 20,000 Restigouche salmon fry received from the Restigouche hatchery and put in the North-west Miramichi River.

The number of parent salmon captured last fall was 435; of these 250 were females and gave 1,625,000 eggs, or an average of 6,500 each. This number of eggs is more than the hatchery can safely accommodate at the hatching-out time. A portion of these will have to be transferred to some other of the nurseries. Many of these parent fish were quite beyond the usual average weight of the ordinary



Miramichi salmon, which gives the belief that they were the product of the eggs received from the larger family of salmon, natives of the Restigouche River, from which nursery they were obtained.

It is proposed to abandon the practice of netting parent salmon up this river during the "close time" in the future, and adopt the method pursued at the Restigouche and Tadoussac establishments, by netting and impounding them from the early runs in June and July. The necessary arrangements to accomplish this will be tried during the coming season; plans of a location for a convenient site to carry out this work have been submitted, and will in all probability be acted upon in the future.

Improvements of a necessary description were made during the past season in repairing the dams and supply pond; a new feed tank is required, as the old one has become decayed. It is desirable that the ceiling and side walls of the hatchery should be battened; the moisture is causing the plastering of the walls to give way, and allowing the lime work to fall into the breeding troughs. Other minor repairs may be required to keep the establishment in a proper condition as a safe and comfortable hatchery, the expense of which will be, comparatively speaking, trifling. There will be found in this report, under "Results of Artificial Fish Culture" (see page 19), most satisfactory letters from practical fishermen and others of the gratifying results experienced from the regular planting of young fry from this establishment in the Miramichi River and its several tributaries.

#### 7.—RESTIGOUCHE HATCHERY, PROVINCE OF QUEBEC.

From the eggs laid down in 1890 there were hatched out and distributed in the Restigouche River and its tributaries 1,750,000 young salmon, some of which were also planted in the Nipissiquit and Bonaventure rivers. This was warranted from the successful results which have attended the planting of fry in the Nipissiquit and Miramichi rivers in former years where adult Restigouche salmon have been taken by anglers and others. There were captured and impounded in the reservoir at the head of tideway some 320 parent salmon. From those 1,416,500 eggs were obtained, and conveyed up river to the hatchery at Dee Side. At the time of writing the embryos are quite visible. The eggs were gathered between the 20th October and 10th of November. It has been found difficult to induce the ordinary net fishermen to capture salmon and keep them alive at the ordinary market value, by reason of the necessity required from them to use small-meshed nets to prevent the fish getting gilled, which so injures them as to cause wounds, and death. The small-meshed nets are more easily seen by the fish, which makes them avoid this net, whereas, with the larger mesh, they attempt to pass through and become gilled, and are therefore useless for the hatchery purposes. The fishermen will not therefore contract to supply salmon, as they become losers by the transaction. The consequence has been that the parent salmon are almost wholly taken in the departmental nets and by its own employees.

The hatchery is reported to be in good repair; it was painted inside and white-washed and strengthened with iron rods to prevent the walls spreading. Some new nets will be required to replace old ones, also stakes to set them. Repairing the reservoir is necessary for the safe-keeping of parent salmon. The total cost of all will be about \$300. The complaints made by certain anglers regarding the decrease of salmon in the river are unfounded, as the number taken for some years past are very greatly in excess of the former years, as the scores have reached 2,000 and 2,500 (excepting last season), whereas, in former years, as many hundreds were never taken. Irregularities in the catch of salmon and variations in their runs up rivers at certain periods of the year is well known the world over; therefore, any decrease in the angling catch by the early fishermen last season is no criterion by which to form a conclusion of decreasing supplies in the river. The reports in the appendices will show a fair average catch by a number of the fly fishermen. The "run" for the season cannot be depreciated, when some trap nets below Dalhousie took from 90 to 100 salmon a day.



The Pitt Creek departmental net made a fair catch of parent fish for the reservoir. This station should be maintained and used for the purposes of the hatchery.

Justice is not done to the protection of the river by the New Brunswick Government, or the angling lessees, in withdrawing their guardians off the rivers on the 1st August. Guardians are not necessary up to this time, as the angling lessees are constantly on the river, who are the best guardians of their interests in preventing poaching. The guardians, so-called, perform the work of postmen and messengers for the lessees rather than doing duty at the proper time. It is after the anglers have left the river and up to the end of November, when salmon have completed their spawning operations, that the real services of the guardians are required. Discharging them on the 1st August means nothing more nor less than throwing the river open to all kinds of poaching and the killing of salmon on their spawning beds in October and November. A continuance of this unwise system must soon tell sadly in behalf of keeping up the necessary stock of parent salmon for the maintenance of the salmon wealth of the Restigouche River, and its estuary and coast fisheries.

The greatly increased number of anglers now upon the river must have a tendency to destroy too many of the breeding fish which have escaped the gauntlet of the numerous netters in the tide-way. Should this over-desire on the part of anglers to gratify their so-called sporting propensities not be checked, the alternative must be to shorten up the angling season by the Dominion authorities in order to allow more parent fish to escape the angler and reach the spawning grounds to deposit their eggs, and thus provide greater means for the sustenance of the commercial catch of salmon in the tidal waters below, as well as benefiting, in a reasonable degree, the anglers themselves.

There will be found under "Results of Artificial Fish Breeding" (*see* page 20), some very interesting and instructive letters from prominent men, which treat upon the importance of adopting proper means for sustaining the salmon wealth of the Restigouche fisheries.

#### 8.—GASPÉ HATCHERY, PROVINCE OF QUEBEC.

The first distribution of salmon fry was on the 15th June and ended on the 16th July, when 1,000,000 young fish were planted in the York, St. John, and Dartmouth rivers in good condition; large numbers were carried far above the falls in the Dartmouth branches.

Nets were first set for catching parent fish on 6th June in the Dartmouth River, where seventy-two salmon were taken. Thirty were bought from netters at \$2 each. These fish were kept in the reservoirs till 30th October, when sixty-four female gave 1,002,000 eggs. These are progressing satisfactorily.

The hatchery is in good repair. The anglers did not complain of the net fishing this season for getting parent salmon. It will be necessary to set another departmental net in future years or buy more fish from the regular net fishermen, as the means at present used are found to be insufficient to provide full supplies of fish to fill the hatchery with eggs. The catch of salmon on the coast was quite equal to last year.

#### 9.—TADOUSSAC HATCHERY, PROVINCE OF QUEBEC.

During the past season 1,300,000 salmon fry were put out of this hatchery into the tributary streams of the Saguenay River, and also into some small lakes, which latter have proved to be excellent nurseries for the fry until they go down to the St. Lawrence and the sea. The Mowats lakes have shown most satisfactory results from former plantings made in them. The rivers receiving quotas of fry were the Shipshaw, à Mars, St. John, and some smaller streams. The two departmental nets caught 650 salmon; 300 of these were put in the reservoir for breeding purposes; the remaining 350, being the smallest ones, were turned out into the Saguenay. From those retained, 1,800,000 eggs were collected and laid in the troughs of the new hatchery.

A new and commodious fish hatchery has been erected here during the past year; its dimensions are quite large; its size is 102 x 32 feet, and it is located on a much more desirable site than the former one. The water supply is brought direct from the Little Lake, a short distance above, by iron pipes underground, instead of being conveyed as before through several dams, and ponds and wooden race-ways, a long distance to the old hatchery.

The marked increase in the catch of salmon in the Saguenay division shown in former years has proved to be considerably better the past season; and the rivers, from the reports of the guardians, give decided evidence of being well supplied with parent fish. This they attribute largely to the successful rearing and planting of salmon fry from the Tadoussac nursery. The wants for this hatchery another season will be additional numbers of perforated breeding trays to accommodate this more extensive building. A scow also, to replace the former one, which has become decayed, is required to transport the parent salmon from the nets to the reservoir. Letters are attached giving the views of prominent persons regarding the successful results obtained from the use of the hatchery.

#### 10.—MAGOG HATCHERY, PROVINCE OF QUEBEC.

This establishment is supplied with salmon trout eggs in a semi-hatched stage from the Newcastle hatchery in Ontario; and whitefish ova in a like condition are obtained from the Sandwich nursery; 1,800,000 salmon trout and 1,500,000 whitefish eggs were transferred from these places and laid down in the Magog institution in February, 1890. These appear to have done very well, as the officer reports 1,725,000 trout and 1,325,000 whitefish fry having been safely planted in many of the lakes in the Eastern Townships. From enquiries made from fishermen and others, they say the increase of these fish in their waters is very perceptible.

#### 11.—NEWCASTLE HATCHERY, PROVINCE OF ONTARIO.

The salmon trout, whitefish and speckled trout bred at this nursery were most satisfactorily distributed. The officer in charge recommends larger distributions being made in a lesser number of places for producing more satisfactory results. If some of the important waters were more largely supplied less expense would be incurred, with greater benefits shown.

The grand total of fry and eyed eggs turned out of this parent institution was 14,917,500. The descriptions were: salmon trout, 11,750,000; whitefish, 2,700,000; speckled trout, 467,000. Of the above gross numbers, no less than 7,110,000 were transferred to other hatcheries in the Maritime Provinces; the balances were planted in numerous lakes and streams throughout Ontario. The planting and transferring of fry and eyed eggs were attended with marked success.

The general decrease in the catch of fish in Lake Ontario which had been experienced for many years past from improvident fishing in the earlier periods of the country now shows signs of recuperation in certain parts of the lake. Salmon trout and whitefish were taken in large numbers with gill nets along the shores fronting Bowmanville, Newcastle, Port Hope, Brighton, Picton and Belleville during the past year. It is said some of the Georgian Bay fishermen, finding their catch decreased there, contemplate fishing operations in Lake Ontario again. This evidence of the improvement in the fishing in Lake Ontario is said to be attributed in a large degree to the large numbers of young fish which have been annually planted off those points in the lake for several years past.

The collecting of trout eggs at Wiarton in the Georgian Bay did not prove as successful as in former years. This is accounted for by the very much reduced number of parent fish that entered Colpoys Bay last autumn, and from the additional fact of the Cape Croker Indians being allowed to fish during the close season on their preserve at the entrance of the bay, thus killing and otherwise stopping large numbers of the parent fish from reaching their spawning ground inside the bay.



These pregnant fish should not be allowed in the market in this gravid and unwholesome state, nor should the Indians be allowed to take them during the "close season." From the causes thus described only 5,500,000 eggs were obtained in 1891, as against 13,000,000 collected in 1890. Another cause for the scarcity of eggs collected was the extreme rough weather which prevailed during the usual fishing period of November; the easterly winds coming into the bay made it so rough that many days were lost in fishing the nets, actually unfitting them in some cases for work.

The first lot of parent fish was taken on 20th of October. The first lot of eggs was gathered on 28th of October, when 400,000 were collected, and the last were got on 29th November, when operations ceased.

Discontent is shown by some of the fishermen and traders on account of lengthening the "close season" to include the last 15 days of October, making 45 days instead of 30 days in November as formerly. Experience goes to show that this increased period is a wise move for giving general protection throughout the Dominion—in some locations a shorter season might do—but upon the whole, and to place all fishermen on an equal basis, and recuperate many of the fishing sections now showing much depletion from overfishing, the newly-established "close season," 15th October to 30th November, should be rigidly upheld. The well-ordained rule, that the "few must give way to the many," must apply here, because a "close season" made to suit the interests of a few of the present over-greedy fishermen and commercial fish dealers would not only injure the many deserving persons who are desirous of a continuous traffic in fish beyond the present time, but would also be most impolitic on the part of the Government to allow the sources of fishing wealth in the Canadian waters to become lost to the future inhabitants of the country.

#### 12.—SANDWICH HATCHERY, PROVINCE OF ONTARIO.

The work at this hatchery during 1891 has resulted very satisfactorily. There were put out from it large numbers of fry and eyed eggs—of whitefish 76,000,000, and of pickerel fry 15,000,000, making a grand total of 91,000,000 of young fish all told.

Some 16,000,000 of the eyed eggs of the whitefish above mentioned were transferred to the Maritime Provinces nurseries—and the balance of the whitefish and pickerel were distributed in many of the principal lakes and other waters of Ontario. The whole of this large distribution was performed most satisfactorily, the loss being inappreciably felt.

The quantities of whitefish eggs collected in 1891 were considerably less than in 1890, the number being 15,000,000 shorter than in 1891, occasioned by violence of storms, which operated seriously against the catching of the usual supply of parent fish, and also in breaking up the pens and cribs in which the fish were impounded—causing the escape of many and death of others, and consequent loss of some millions of eggs. Recurrences of this nature, which have been experienced more or less in former years, must be remedied in the future by building some permanent breakwater to ward off the action of the storms and violence of the water against the pens and cribs in which the parent fish are kept till fully ripe for spawning. The plans and estimates for this breakwater submitted last season should be adopted and carried out for next year's operations in collecting eggs at Bois Blanc, on the Detroit River. A new fishing boat is required; this, with the proposed breakwater, will cost about \$300. Some slight improvements about the hatchery are also required, at a probable cost of some \$50. It is recommended by the officer in charge that the Fighting Island fishing station be occupied and worked by the employés at the hatchery, with the necessary plant and gear to belong to the department, to be got in readiness for next year's operations.

#### 13.—OTTAWA HATCHERY, PROVINCE OF ONTARIO.

This establishment, at the seat of Government in Ottawa, is wholly provided with its supplies of eggs from the Newcastle and Sandwich hatcheries. The eggs of



salmon trout, speckled trout and whitefish are transferred in the semi-hatched stage in January and February to this Ottawa hatchery, where they are hatched, and afterwards distributed in the waters of the Ottawa district as may be considered best adapted to receive them. In this way some 5,580,000 young fish were put out last season. The descriptions were: 1,380,000 salmon trout, 83,000 speckled trout and 4,117,000 whitefish. The speckled trout were disposed of on the application of angling clubs, and others, paying a small fee per thousand, sufficient to recoup the outlay in procuring the eggs. The salmon trout and whitefish were distributed in the public waters gratis in like manner as at all the other Government hatcheries in the Dominion.

The living specimens of fish hatched and grown in the glass aquaria have added much interest to the general show in the exhibition buildings. It has been found that some of the larger specimens cannot live in the high temperature of water reached during the extreme hot weather of the summer.

The proposition suggested by the caretaker to lower this temperature during these hot months by the application of ice should be carried out, and thus sustain this interesting exhibit of live fish, which affords opportunity for observation to study their nature, habits and growth, as well as giving additional knowledge in fish life to the many persons who daily visit this establishment, whose numbers amounted to nearly 50,000 during the past year.

#### 14.—BAY VIEW LOBSTER HATCHERY, NOVA SCOTIA.

This novel undertaking of lobster breeding by the artificial methods of propagation was first commenced in Canada during the past year, and is the first governmental work of its magnitude in the Dominion, or in the adjoining Republic of the United States. An establishment for lobster breeding, the first of its kind in America, was successfully operated in Newfoundland in 1890, from which the present one in Nova Scotia was originally conceived, but the *modus operandi* and the appliances used in this Canadian lobster hatchery are quite different. The automatic glass incubator (Wilmot's original patented invention), with some slight modifications, was the appliance used, and found to answer all purposes admirably. Steam is the propelling power to work the machinery throughout. The lateness in putting up the building gave only some fifteen days of the season to carry out the new enterprise. Many difficulties and obstacles were met with and overcome, resulting in the successful hatching and putting out of some 7,000,000 of healthy lobster fry into the adjoining waters of the Northumberland Straits.

#### APPENDICES.

The appendices referred to in this general report on fish cultural operations in Canada for 1891 will be found on page 23, in which the particular details at each establishment will be more minutely described by the individual officer in charge of each hatchery.

All of the above is respectfully submitted by

SAMUEL WILMOT,

*General Superintendent Fish Culture of the Dominion of Canada.*

#### ADDENDUM.

##### RESULTS OF ARTIFICIAL FISH-BREEDING.

##### EXTRACT FROM OFFICER SHEASGREEN'S REPORT.

"Artificial fish culture has ceased to be thought of by the people of this river as an experiment, as the evidences of its benefits are too plainly seen to be denied. This is no mere assertion.

Leaving aside the views of the fly fishermen, who have, generally speaking, been in favour of artificial fish culture since its conception, and taking only the opinions expressed by the leaders of the net fishermen, who have been the most

sceptical class and whose prejudices against the work have been the most difficult to overcome, and it will be found that irrespective of politics and party feelings all agree in crediting the hatchery as being the remedy that has saved the waters of this river from depletion. Chiefly among those with whom I have conversed on the subject are John Betts, Esq., the principal fish dealer and shipper of the South-west Miramichi; John McCullum, Esq., and Jared Tozer, Esq., who represent the fishing interest of the North-west Miramichi. These gentlemen agree that the catch of salmon for the season just closed has been the best for years. This remunerative condition of the fishery they attribute to artificial breeding, asserting that if no other than the natural source were to be relied on to supply the demands of the many engines of destruction used by the fishermen every season, the life of the salmon fishing industry would soon have been crushed."

It will be noticed that these named gentlemen represent the fishing interest of the two main branches of the Upper Miramichi. I have also written to some of the leading dealers of the Miramichi Bay asking for opinions on the catch of fish and the subject of the artificial breeding. In answer thereto, I have received several replies, and I will here include copies of the three containing most information:—

BAY DU VIN, 26th December, 1891.

I. SHEASGREEN, Esq.,

In charge of Miramichi Hatchery.

DEAR SIR,—Yours of the 21st inst. to hand. In reply we enclose herewith a statement of five fishing stands for the past fourteen years, which shows that salmon are not on the decrease by any means. The number of salmon mentioned in this statement have been taken out of the same nets each year, set in the same places, in precisely the same manner. Artificial hatching benefits the fishery; but at the same time, we believe that if a certain amount of money was judiciously expended in protecting the spawning streams from poachers it would also greatly improve the fishery. We are satisfied that a large amount of poaching, both with spears and nets, goes on, both on the Bartibogue and Tabusintac rivers, although perhaps not quite as much as formerly.

Yours very respectfully,

J. W. & J. ANDERSON.

The following is the statement of the catch from the above mentioned five fishing stands:—

	Salmon.
1878.....	1,023
1879.....	990
1880.....	643
1881.....	320
1882.....	496
1883.....	819
1884.....	1,051
1885.....	1,098
1886.....	490
1887.....	777
1888.....	1,074
1889.....	564
1890.....	706
1891.....	1,065

The seasons of 1886 and 1889 were very stormy, which prevented the bay fishermen from using their nets to any advantage; hence the small catches marked opposite these years.

CHURCH POINT, N.B., 24th December, 1891.

MR. ISAAC SHEASGREEN,

Fishery Officer in charge of Hatchery.

DEAR SIR,—Your letter of 20th December received. I find on looking up the catch of salmon for the last fourteen years that the catch of the last seven years



has increased 38 per cent over the previous seven. Taking into consideration the fact that our river has been fished for years with the most destructive kind of trap nets, illegally set, also the wholesale manner in which the spawning streams have been depleted by poachers, the destruction of ova by the lumber drives, etc., I sincerely believe the salmon of the Miramichi would now be almost extinct but for the hatchery during the last few years. Looking at these facts, along with the gradual increase of salmon, I think we have conclusive evidence that the salmon fishery of this bay has benefited greatly by artificial culture, and I believe, by the same means, the supply can be increased to an unlimited extent.

Yours very respectfully,

JAS. D. MORRISON.

NEGUAC, N.B., 28th December, 1891.

DEAR SIR,—I have received your letter of the 20th instant, and in reply will say that the catch of salmon in my nets has increased about 35 per cent during the last six years. I find on looking over my books that the usual number taken from each set of nets in season averages about 350.

As salmon have not now the chance they formerly had of depositing their eggs, where they could lie unmolested, by lumber and other destructive agencies, I sincerely wish that the work of artificial breeding may be continued.

Yours truly,

ANTHONY ADAMS.

Thus it will be seen that the fishermen all over this section of the country report steady runs of salmon every season—while some are jubilant and expect still greater results from artificial breeding. Those men are not now disheartened, as they were some years ago, by the small returns of their business, but it is a fact which speaks volumes that they grasp every opportunity to invest money in the fishery industry.

Another fact which can clearly be credited to the hatcheries is the appearance of numbers of large salmon in the river. The fishermen employed to procure parent fish this last season captured as many as sixty of these fish—differing greatly in size and general appearance from the native salmon. This can plainly be attributed to the planting of Restigouche fry on these head waters. I might here add, that from personal observation I have ascertained that the river is swarming with grilse, smolts and parrs, and while procuring parent salmon last autumn the fishermen and myself would sometimes observe as many as one hundred of these small fish in one pool. We also get great numbers of grilse in the sweep nets, which we always liberate. This is an experience that was never met with some five years ago, and goes to prove that our rivers, which were at that time on the verge of depletion, have now nearly recovered the wealth with which Providence so bountifully supplied them in the beginning, but which the avaricious and destructive hand of man would have entirely destroyed had not the natural sources been assisted by artificial means.

#### EXTRACTS FROM OFFICER MOWAT'S REPORT.

CAMPBELLTON, N.B., 26th December, 1891.

Mr. ALEX. MOWAT,

Restigouche Hatchery.

DEAR SIR,—In reply to yours asking my views regarding the catch of salmon in the net fishery the past season, and why I discontinued catching parent salmon for the hatchery, I beg to say I fish three stands of nets on shares and that the past year's fishing was not quite up to that of 1890. I attribute this to two causes: (1) The fish were two weeks later than usual coming into the river; (2) The water was low and clear, and the green dirt or slime began gathering on the nets, causing



the fish to shy around them. Also, the river and coast are over-fished: too many anglers on the river, and the peche or trap-nets below Dalhousie observe no close time—they fish Sunday and Saturday. How is it possible for the river to maintain its standard of fish under these circumstances? I fished live fish for the hatchery two seasons; the last season I only caught 17 salmon. I found the fish would not enter the small mesh nets which I was compelled to use so that the fish could be kept alive and without injury. I therefore discontinued fishing live fish because it was a loss to me financially, and caused a great deal of extra work and trouble.

Yours truly,

WILLIAM PROUT.

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BROADLANDS, 23rd December, 1891.

ALEX. MOWAT, Esq.,  
Campbellton.

DEAR SIR,—Yours of the 8th instant, asking my views on the salmon fisheries, has been duly received, and in answer thereto I beg to say that my catch of fish for the past season was not up to the average, especially of live fish, though I was well fitted out, having new pound nets, and had them in early in the spring to get the first fish; but the fish did not come in any quantity until late, and then the water was low and clear, which makes it more difficult to catch salmon at all, and especially live ones, as they will not go into the pounds except there is a strong current and the water somewhat dirty; but with low water, when it is always clear, I cannot catch fish alive for breeding purposes. I have observed that even a small rise in the water during the fishing season there would be a corresponding increase in the quantity of live fish, while the current was strong and the water dark. It is a well-known fact with all who have tried fishing for live salmon that they will not enter small mesh pounds as readily as they will those of the ordinary size. So much is this the case that different persons who fitted out to catch salmon for the hatchery only fished for them one or two seasons, and the reason they gave to me was, that it would not pay, as they could catch twice as many salmon in their large mesh pounds as they could in their small mesh ones, and I find it to be so. If I had only small mesh in my set it would not pay to fish it—except a short time at the first of the fishing, while the water was high. I did my best to get live fish last season, and the result was less than ever before, and I have been at it since 1886. You say you only caught 177 fish in the Murray Island set. Considering the lowness of the water during the whole season I don't think you should complain; you got as many in proportion as any set of nets above Campbellton; and one set will do well one season and poor another, though average catch may be the same. No one can account for it, but it is so.

But if the salmon are to be preserved in the river there must be some restrictions put on the angler. One man with a rod often takes more fish in two or three weeks than the average stand of nets can take in the whole season. I know it is difficult to deal with this matter; but there should be a limit to the quantity that each rod should be allowed to take—say 30 or 35; that should be enough for sport—and it is not expected that they are to make a business of it, as some appear to do by selling their fish.

And then the nets in the bay below Dalhousie should be compelled to observe the close season—and raise their nets over Sunday. I am quite confident that it is possible to do so. It was always possible to raise them on the Quebec side of the bay, which is more exposed than the south side, and it is only justice that all should be under the same law. Hoping the coming season may be better for you as well as myself.

I remain, yours truly,

MELVIN ADAMS, J. P.

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GENERAL REMARKS ON THE SALMON FISHERIES OF THE RESTIGOUCHE RIVER AND BAIE DES CHALEURS, WITH SUGGESTIONS FOR BETTER MAINTENANCE AND IMPROVEMENT OF THE RIVER, FROM ALEX. MOWAT'S REPORT.

"As to the outcry made about the salmon fishery declining, when the Restigouche Salmon Club was organized a few years ago a share in it then cost \$1,000; now a share is worth \$7,500 to admit a member, and all fishing property has advanced at a like ratio. When Messrs. Brydges and Fleming were lessees of the river, before riparian rights were established, they would consider themselves in luck if a party of five or six rods would catch 70 or 80 fish in the season, and having the whole river to themselves. Now a riparian owner, owning a small piece of water (not a pool), if he does not make a score of several fish per day for a month or so report goes forth that there is no fish in the river and the fishery is declining.

"Is there another river on the continent of America with such a record as the Restigouche, or one that is fished so much by anglers; and by netters in the estuary and bay outside? Take the net fishery: there are some 300 or 400 stations of nets for 175 miles, from the mouth of the Baie des Chaleurs to head of tidal water, with a catch of a million pounds of fish annually. There may be seen 100 rods on the river at one time, every available part of the water being fished and whipped from tide head to the mouth of the Kedgwick, summing up a score of 2,000 and 2,500 fish for the last number of years, until the past season. Yet the net fishermen and anglers cannot understand why this valuable fishery is said to be declining.

"There appears to have been a falling off the past season. The fish were two or three weeks later than usual entering the river; the water was very low and warm and the fish would not rise to the fly; still, some fairly good catches were made. One party on the Upsalquitch River (3 rods in 8 days) killed 53 fish. This stream is coming up every year; fish are taken in various pools now, where a few years ago it would not be thought of making a trial. The inhabitants on the river believe this is the result of the fry planted from the Restigouche hatchery. Mr. A. Alford on a small piece of private water killed 30 fish; Mr. McAndrew killed 44 salmon, and many other persons caught from 25 to 40 fish. It was stated that one man brought down several barrels of salted salmon caught at the mouth of the Kedgwick with the fly. Some of the trap nets set below Dalhousie (where the fishermen are so favoured as to observe no close time) took each as high as 96 and 100 salmon in one day, about the 17th of June.

"Complaint is made about the Government nets injuring the river by taking 300 or 400 salmon for artificial breeding purposes. The facts are, a portion of these are bought from Mr. Adams, a licensed fisherman. Where the Government net is set at Murray Island, all the salmon taken at this station for breeding purposes would be taken by the licensed net set immediately above it if the Government nets were not set there. Therefore, all salmon taken in it are a clear gain to the river, as the eggs are all saved and the fish are turned out alive again. In order to fish the north side, or "Pitt's Creek" net, the department first abolished the Mission Point station net, which they formerly used. Under the present system, if those 300 or 400 fish referred to above were not taken for reproductive purposes and preserved they would otherwise be caught and totally lost to the river.

"A great injustice is done to the river by the Local Government and the angling lessees discharging the guardians on the 1st of August, thus allowing the river to be free and poached in the manner it was, just at the very time when guardianship is most required. No valid reason has been given for this act, but it is generally supposed that the agitation against the Government nets, coupled with the discharge of the guardians, was done with a view to decry the river, in order that the Restigouche Salmon Club might get a renewal of their leases at the coming sales in March, 1892, at a lower rate than paid for heretofore."



## APPENDICES.

## REPORTS OF THE OFFICERS IN CHARGE OF FISH-BREEDING ESTABLISHMENTS IN THE SEVERAL PROVINCES OF CANADA, FOR 1891.

## 1.—FRASER RIVER HATCHERY.

## PROVINCE OF BRITISH COLUMBIA.

## REPORT OF THE OFFICER IN CHARGE OF THE FRASER RIVER HATCHERY, 1891.

SIR,—I have the honour to submit my annual report of the operations connected with the Fraser River fish hatchery for the year 1891.

I find from accounts and statements in my office that 3,861,000 Sockeye eggs were deposited in the Fraser River hatchery in the fall of 1890, and that 257,500 were picked out during the winter, leaving 3,603,500 young fish, which were planted as follows :—

March 14th...	Pit Lake.....	500,000
" 17th.....	Silver Creek, Harrison Lake .....	716,000
" 19th .....	Wicomea Slough .....	557,000
April 1st.....	Nicomkel River.....	50,000
" 7th.....	Chiliwack Rapids.....	782,000
" 11th.....	Coquitlam River.....	260,000
" —th.....	Harrison River.....	738,500
		<u>3,603,500</u>

On the 21st day of September, 1891, I commenced to have the hatchery premises repaired and put in order for the season's operations, and on the 27th of that month I despatched Mr. Thos. McNeish with two men to Morris Creek to make the necessary preparations for capturing the parent fish. On the 5th of October I went to Morris Creek, and found that pens were completed and that several hundreds of salmon were then in confinement, but not ripe for stripping. As the pens and leaders showed signs of weakness we used such material as we could find in repairing and strengthening the structure. Previous to my arrival McNeish had sent to the hatchery the first consignment of 328,000 eggs, and on the 7th of October we sent down 2,170,000; on the 20th of October we sent to the hatchery 1,252,000, the last lot, making in all 6,485,500, being, in my opinion, the full capacity, without overcrowding, of the Fraser River hatchery.

I am unable to state the number of parent fish stripped. I have stated that when we commenced operations a large number of the parent fish were not ripe for stripping, and such was the case with quite a number even when we stripped the last lot. No violence was used; unless the ova was shed with a gentle pressure the fish were put back in the creek, apparently none the worse. Having to handle so many fish, the men did not keep an account of the number from which the ova was taken. When we stripped the last lot of salmon at Morris Creek, on the 19th day of October, Sockeye salmon were still in Morris Lake in very large numbers, and many of the female fish, at that late date, were not ready to spawn. The Indians who live on Harrison River, and many white fishermen on the Fraser, also, consider those late fish a peculiar type of fish due to the hatchery. Although I require more evidence before I adopt that opinion, still I can see nothing improbable in thus accounting for them, especially as in all the other creeks and rivers, of which I have any knowledge, connected with the Fraser River, the Sockeye salmon deposit their spawn several weeks earlier than they do in Morris Creek.

The hatchery premises under my charge will, with slight repairs, be good for another year, after which they will require extensive repairs and an almost complete new outfit of troughs, etc. It will be, in the meantime, for the department to



consider the propriety of building a new and more commodious hatchery in a more convenient locality. The great expense and risk of damage to the ova in conveying it to the present hatchery, and also in distributing the fry—a large proportion of it going back to the vicinity of the place from which the ova was obtained—would have induced me to urgently recommend the department to build a new hatchery in time for next season's operations, only that I am not at present prepared to recommend a site, and a mistake in this direction is to be avoided if possible. I have a strong desire to visit several of the principal spawning places connected with the Lower Fraser early in September next, to see for myself the number of salmon then depositing their ova and the facilities for capturing the parent fish, and will endeavour to gain the consent of the Minister to my doing so. After such a visit I would be in a much better position to recommend a locality for a new site.

The very great value of the Fraser River hatchery as an auxiliary to the natural spawning grounds in keeping up a large and regular supply of salmon is now all but universally acknowledged, and any interruption to its operations would be looked upon by eighteen-twentieths of the canning men and others interested in the salmon fishing industry of the Fraser River as a very great calamity. The owners of freezing establishments, the fresh fish dealers and the canning men are all unanimously in favour of an extension of fish-breeding operations, so as to include the spring salmon, or quinnat, and sockeye ova, from different creeks, at the season of their maturity.

In view, then, of the facts of the case, and drawing my conclusions from a consideration of the best data at my command, I beg to suggest that the present Fraser River hatchery continue to be operated to the best advantage possible for another season, and that in the meantime a suitable site be selected, and premises completed ready to be operated in the season of 1893-4. The great and constantly-increasing demand for salmon, for exportation fresh, has rendered it expedient that the early runs be taken into consideration in future arrangements for artificial propagation.

I herewith enclose a letter which I received from Mr. D. J. Munn, a close student of the habits of salmon, who visited the Upper Lillooet River and Seeton and Anderson's lakes in October last. These waters are the valuable and extensive breeding places and nurseries for salmon in connection with the Fraser River. Mr. Munn states that a large number of spent salmon were making their way to Seeton Lake during his visit there.

I have the honour to be, Sir,

Your obedient servant,

JOHN McNAB,

*Officer in Charge.*

## 2.—SYDNEY HATCHERY.

### PROVINCE OF NOVA SCOTIA.

#### REPORT OF THE OFFICER IN CHARGE OF THE SYDNEY HATCHERY, 1891.

SIR,—I have the honour to submit herewith my annual report of the work done at this hatchery during the past year.

Of the 1,218,000 in the hatching troughs in the season of 1890, 1,055,000 were hatched and distributed in the most healthful conditions, as follows, viz:—

Middle River, Victoria County.....	150,000
Baddeck River do .....	50,000
Margaree River, Inverness County .....	100,000
Mabou do .....	25,000
Tein River, Richmond County.....	25,000
Sydney River, Cape Breton County.....	300,000
Benacadia do do .....	50,000
Balls Creek do .....	50,000

Trout Brook, Cape Breton County. ....	100,000
Salmon River do .....	50,000
George's do .....	50,000
Big Pond do .....	20,000
Leitche's Creek do .....	50,000
Black Brook do .....	30,000
Hatchery Brook do .....	5,000
Total.....	1,055,000

All these, I take pleasure in saying, were deposited in the best condition. The number deposited in the Mabou River was small, but as this was my first trip there and the place hard of access, I decided that this would be enough to commence with.

I succeeded this season in securing 345 parent salmon, 205 of which were females. From these I collected 1,200,000 ova, as will be seen in the following table:—

Name of Place.	Males.	Females.	Total.	No. of Ova.
Margaree (Upper Settlement) .....	(Not	spawned.)	6	(None.)
Middle River do .....	53	107	160	749,000
Middle River (Lower Settlement).....	30	20	50	120,000
Sydney River.....	42	60	102	280,000
Salmon River.....	9	18	27	51,000
Totals.....	134	205	345	1,200,000

A falling off may be noticed in the Margaree River, which may be attributed to a disappointment on the part of the fishermen last season. Last season they succeeded in securing only 30 fish, owing to the prevailing high waters; this number did not entitle them to anything for watching. They evidently thought that I could not stock the hatchery without their fish, but I am glad to say that the rivers near the hatchery are increasing in their production and that hereafter I can secure enough parent fish and ova to supply this hatchery independent of the Margaree, which will make the expense much less. The Sydney River shows a steady increase in the number taken each year.

As to increase, I may say that in the Sidney River salmon were never taken in larger numbers than this year; the same will apply to the Bras d'Or lakes; and with the appliance the fishermen have, it is a wonder they get any at all, their appliance having gone down with the decrease that existed some four years ago. The fishing at the Margaree this season was also good, if not above the average. In the Sydney River above the forks two salmon were raised to the fly in July, one by Dr. Kenorall and one by an officer from one of Her Majesty's ships. In the latter case the fish was fairly hooked and after some time got away. Would not this be a step in making a late river an early one, as far as fly fishing is concerned.

On the request of Mr. D. J. Kinnelly, manager of the Sydney and Louisburg Coal and Railway Company, I planted about 3,000 fry in a pond at Louisburg in the spring of 1883. In the following summer he wrote me saying the young fry were doing splendidly and they were from 3 to 4 inches in length. Some few days ago he informed me that they were still doing well and that any quantity might be caught with the fly, he having caught some himself, but let them go again; they were then about 8 inches in length. He strongly advises the stocking of a stream that flows into the Louisburg harbour. The pond above referred to is separated from the waters of the harbour by a narrow beach, and has no other outlet than the drainage through the loose sand and pebbles.



The hatchery was painted outside and the inside of the hatchery room was painted and the ceiling whitewashed. The fence about the grounds was limed also, and the outhouses, with the gates, painted. The building now and the surrounding grounds present a very nice appearance and I think will compare favourably with any other hatchery in the Dominion.

The requirement for the coming year will likely be a new pipe from the dam to the hatchery and slight repairs to the reception tank.

I have the honour to be, Sir,

Your obedient servant,

C. A. FARQUHARSON.

### 3.—BEDFORD HATCHERY.

#### PROVINCE OF NOVA SCOTIA.

##### REPORT OF THE OFFICER IN CHARGE OF THE BEDFORD HATCHERY, 1891.

I have the honour herewith to submit my annual report upon the operations at this hatchery during the past year.

As stated in my last report, the number of ova laid down in the hatching troughs of this hatchery in the autumn of 1890 was 400,000 of the "*Salmo salar*," or salt water salmon. The supply of eggs for this hatchery was subsequently increased by the receipt of a shipment from the Ontario hatcheries, consisting of 400,000 salmon trout and 2,500,000 whitefish ova.

It was the intention to have conveyed the greater portion of the whitefish ova, previous to hatching, to some of the subsidiary hatcheries in whose vicinities larger and more suitable lakes exist than in this portion of the province; but the advanced stage of incubation of these eggs on their arrival here prevented this being done. A considerable number had already hatched upon the trays on which they were brought to this point, and the balance hatched out very shortly after being placed in the incubators. Although hatching at this early date, a large proportion of the young fish did very well, and as soon as the food sac was absorbed they were conveyed to the several lakes stocked in past years. These waters were then still solidly frozen, and it was found necessary to cut holes through the ice in order to get the young fish into the water. This feature I consider very unfavourable and, I fear, will seriously affect the success in endeavouring to introduce those fish into the waters of this province.

The low temperature of the water in these lakes while still covered with ice, and the consequent absence of any vegetable life at this time, and the dormant condition of all insect food, would prevent these young fish from obtaining the necessary sustenance, and in all probability a certain proportion of them would be lost before a supply of natural food can be obtained.

The late date at which these eggs are transferred from the Ontario hatcheries may be cause of this premature hatching. A consideration of the circumstances attending the collection of these eggs and their treatment subsequently leads me to conclude that any ova intended for these provinces should be shipped as early as the first of January instead of the latter part of February, as has been the custom in past years.

The retention of the ova in the hatchery at Sandwich in waters of a comparatively high temperature until the last of February produces a more rapid development of the embryo than is desirable when the ova are to be subsequently moved to the colder waters of this province; further, the handling and moving the eggs from the incubators, then to the trays upon which they are shipped, and again from the trays to the incubators in this hatchery, increases the tendency to early hatching; consequently, some of the fish prematurely hatch very soon after reaching here, and in most seasons the umbilical sac is absorbed long before the lakes are open.



From the observations here I am led to believe that the embryo is sufficiently advanced on the first of January to permit of their being transferred to this hatchery with safety, and I would suggest that this course be adopted in future.

Two-fifths of this province are covered with lakes of all sizes and of great depth and abound in vegetable and animal food, and I can see nothing to prevent their being fully stocked with whitefish and thus creating a valuable and extensive inland fishery available to those inhabitants residing at remote distances from the sea.

As to the success attending the past efforts in stocking these waters it is difficult to give any precise information, as no attempt has been made to capture any of these fish. Not being a surface or game fish, and as they can only be caught by nets set on the bottoms of the lakes, is no doubt the cause of the absence of any evidences of their existence in these lakes; but in order to test the progress of the work, the department should institute such means during next summer as will enable it to solve this question.

The very limited numbers of ova supplied in past years, with which to carry out this idea, does not sufficiently encourage the hope of obtaining any very decided evidence of success. The difficulties attending the locating of the feeding grounds of these fish in the several lakes and the adverse chances accompanying the work may for a time prevent the securing of the evidence sought for.

At a very slight expense for increasing the capacity for hatching whitefish, which I trust before next season may be granted, their future shipments might be correspondingly augmented.

The success attending the hatching of the salmon trout was similar to that of previous years and may be said to have been satisfactory, although it is almost impossible to hatch a fair proportion in the waters which supply the central hatchery. As in past years, the greater portion of the stock was distributed amongst the subsidiary hatcheries, at which points excellent results were obtained. Of the number retained in this hatchery not more than ten per cent were hatched. The cause of this difficulty existing here can only be attributed to the nature of the water supplying this hatchery.

About the 1st of April there was transferred to the several small hatcheries the following numbers of the semi-hatched ova of the salmon and salmon trout:—

	Salmon Ova.	Salmon Trout.
Lochaber hatchery.....	30,000	50,000
Kempt do .....	30,000	50,000
Tusket do .....	30,000	50,000
Sheet Harbour hatchery.....	30,000	50,000
Kentville hatchery.....	.....	50,000
Total.....	<u>120,000</u>	<u>250,000</u>

Making a total of 120,000 salmon ova and 250,000 salmon trout distributed at that date. These were subsequently successfully hatched and planted in the several rivers and lakes best adapted for them in the vicinity of the different smaller hatcheries. The balance of the stock was retained here, and amounted to 100,000 salmon trout and 180,000 salmon ova. As already stated, very poor success was met with in hatching the salmon trout, nearly all succumbing to the unfitness of their water when about to burst from the shell. With the salmon ova no trouble was experienced, and at the proper time they were distributed amongst the following rivers:—

Musquodoboit River, Halifax County.....	40,000
Indian do do do .....	20,000
Philip do Cumberland County. ....	40,000
Wallace do do do .....	40,000
West do Pictou do .....	40,000
	<u>180,000</u>

The whitefish hatching was fairly successful and the young fish were planted in the lakes in this vicinity as follows:—

Hubley's Lake, Halifax County.....	250,000
Grand do do do .....	500,000
Sandy do do do .....	250,000
Williams do do do .....	250,000
Paradise do Annapolis do .....	500,000
George do do do .....	250,000
	<u>2,000,000</u>

Making a total distribution of the several kinds as follows:—

Salmon .....	300,000
Salmon trout .....	250,000
Whitefish.....	2,000,000
	<u>2,550,000</u>

This output when compared with that of previous years is somewhat unsatisfactory. The greatly decreased output of fry was entirely in the numbers of salmon fry hatched, and was due to unsuccessful results attending the efforts to secure supplies of spawning fish.

#### *Capture of Parent Fish and Collection of Ova.*

This being the first and most important part of the work in connection with artificial fish culture, and as all subsequent operations and results are governed by it, demands the greatest energy and attention from those in charge of the work. Having secured the required number of spawning fish from which to obtain the supplies of ova, the subsequent care and treatment are governed by well-understood and defined principles, and a fair degree of certainty as to results may be entertained; on the other hand, the absence of any degree of certainty attending all operations directed towards the capture of the parent fish is a source of considerable anxiety to those responsible for the work.

The probability of a scarcity of fish and of unfavourable conditions of the rivers during the autumn months, either from heavy freshets preventing the setting of nets, or, on the contrary, low stages of water, which prevent the fish from entering the river, precludes the anticipation of any measure of success, and hence it is sometimes found that notwithstanding the adoption of the most suitable and effective appliances, and the employment of the most skilful and faithful fishermen, but poor results are obtained for the large expenditure incurred and the efforts which may have been put forth.

The plan adopted and hitherto worked at this hatchery has been that of endeavouring to capture the fish as they attempt to enter the rivers in the autumn for the purpose of depositing their ova, and taking the whole series of years since the opening of this establishment, a fair average of ova has been secured, but the expenditure upon this particular work has been greater than was desirable.

A further unfavourable and undesirable phase connected with this plan lies in the antagonism against our work around amongst the resident fishermen of the rivers upon which efforts were made to catch the parent fish. Being prevented by the law from capturing those fish themselves they fail to see or understand the justice of this fishing by departmental officers and employees, notwithstanding they are aware that these fish are used only for breeding purposes and are liberated alive after the ova has been collected.

They indulge in the play of their imaginations on the fancied sin and cruelty of ravishing these fish while about to deposit their ova on the natural spawning grounds, and in many instances have given most violent and determined opposition,



to repel which it has been necessary to employ watchmen and incur heavy expenditure, to guard the fish from their depredations, which have been put into the tanks or reservoirs for safety.

Representations of the above conditions having been made to the department, and the adoption of the plans and modes for securing a supply of fish being suggested, instructions were given to take the preliminary steps towards the introduction of such plans. The plan suggested was as follows: It was proposed to obtain supplies of salmon, during the legal fishing season for taking them, when they were being caught for marketable purposes, either by purchasing the live fish at a certain price per pound or per fish from the fishermen on the coast, or by establishing and operating certain fishing stations in connection with the hatchery. Having obtained the fish, it was proposed to retain them during the summer months and until ready for manipulation in salt water coves or reservoirs, where a free ebb and flow of the tide could be secured.

In accordance with such instructions, an effort was made to select some locality where, from the existence of favourable conditions, this scheme could be applied and the work carried on in future at the least possible cost, and with a reasonable degree of certainty as to the results. This was highly successful, and it was recommended that the fishing stations located on the Gulf shore of Big Island, Merigomish, Pictou County, be selected as the base of operations. This point possesses many advantages over that of any other that came under consideration. It is readily accessible either by water from Pictou town or by rail from New Glasgow. The average catch per net at this point, it was found by reference to the annual Fisheries report, was greater than with any other nets located at any other points of easy access; consequently, to secure a full supply of fish fewer stands or fleets would be required.

In making a selection for this work many matters and points were to be considered:

1st. Proximity to the hatchery, either as regards distance or time required, and mode of conveyance obtainable to and from the hatchery.

2nd. The price at which the fish could be purchased.

3rd. The proximity of the fishing ground to some cove or small bay, which could be utilized as a reservoir in which to retain the parent fish until ready for the collection of the ova.

Having selected the above point as the base for fishing operations it was necessary to find the required cove or bay. This cove was fortunately discovered on the shore of the mainland at Merigomish and not over two and a-half miles by water distant from fishing grounds. I found such a cove, possessing all the desired requirements, and which at but slight cost could be made available for the purpose mentioned.

This cove is cut off from the Merigomish Bay and entirely protected from storms and heavy seas by a public roadway, which, at this point, is a dump or filling extending across its mouth, while the free ebb and flow of the tidal waters is permitted through a small bridge or culvert constructed in the filling. From this bridge-way to the head of the cove, at a point reached by ordinary tides, the distance is about 40 rods, and in width at half tide the distance from shore to shore is four rods. At low water this cove becomes dry, and in order to fit it for the purpose it was necessary to build a water-tight breastwork on the inside of the roadway to the height of half tide and to place in the bridge-way such gates as could, at all times, retain at least three feet of water. While these gates prevent the ebb of the tide below the desired depth they permit the full flood to enter the cove, reaching a height of five feet, or two feet above the height of the water at all times held in the cove, thus ensuring the cooling and partial renewal of those waters twice in every twenty-four hours. To facilitate the catching and handling of the fish when about to collect the ova a large tank and spawning shed has been erected at the upper end of the cove, which is supplied with fresh water from a brook which has been turned into it.

Under instructions from the department the above work has been done, and this cove is now ready to receive a full supply of salmon for the next year's operations.



Negotiations have been carried on and provisional arrangements made for the use of the required number of fishing stands. Instructions are now asked to confirm these arrangements and to authorize the procuring of the necessary nets, boats, &c., to enable the prosecuting of the work next season.

The estimated cost of these appliances, and the annual rental of the fishing stations, and all detailed information relative to the work having been given to the department, in previous reports, no further delay should be permitted, so that matters may be in a position to commence fishing as soon as the next season opens, which, in that locality, will be about the 15th of May.

Fishing for salmon for this season's operations was confined to the two rivers, French and Sutherland's, which enter Merigomish Bay at short distances from the reservoir above described. From the information given by residents of that locality it was believed that considerable numbers of salmon still entered those streams in the months of October and November, and on the strength of those representations and from the fact that being contiguous to the cove which was then being prepared and which could be utilized this fall the advisability of operating upon these streams was conceived.

Being anxious to secure all the fish possible fishing was commenced on the 1st of October and continued until the 23rd of November, but poor results were obtained, the entire catch being, on French River 73, and on Barney's River 4, making a total of 77 fish, of which 56 were females, and from which were obtained 600,000 ova.

This stock is much under the capacity of the hatching troughs; therefore arrangements should be made to secure further supplies of salmon ova from some of the hatcheries in the Maritime Provinces, where it is reported good success was met with, and where an overcrowded condition exists in their hatching troughs.

The usual quota of salmon trout and whitefish it is expected will be sent here from Ontario as formerly.

No repairs of any consequence were effected during the past year owing to the time being pretty fully occupied at Merigomish, but it will be necessary to have them done this coming season.

The repairs to the roof of the buildings and to the foundation of the partition, as referred to in my last report, will require attention, and also the removal of the fence enclosing. Detailed estimates of the cost of this work will be submitted at a late date.

The painting of the interior of the hatching room would improve its appearance and cleanliness, and it is hoped permission may be granted to do this next season.

I have the honour to be, Sir,

Your obedient servant,

A. B. WILMOT,

*Officer in Charge.*

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#### 4.—DUNK RIVER.

Not in operation.

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#### 5.—ST. JOHN RIVER HATCHERY.

##### PROVINCE OF NEW BRUNSWICK.

##### REPORT OF THE OFFICER IN CHARGE OF ST. JOHN RIVER FISH HATCHERY FOR 1891.

SIR,—I have the honour to transmit herewith a detailed report of the transactions in connections with the St. John River fish hatchery, in the County of Victoria and Province of New Brunswick.

During 1890 no effort was made to capture parent salmon or to collect ova, on the Tobique or elsewhere, for this hatchery, the department having met with many failures heretofore in trying to secure adequate supplies from that source. Therefore another scheme was adopted and successfully carried out that had long been

contemplated, namely, to capture or purchase the salmon from the fishermen of the St. John harbour. The results of this plan will be fully described later on in this report.

### *Eyed Eggs.*

On the 23rd of last February there was delivered at this establishment by Mr. Charles Wilmot, of the Newcastle hatchery, Ontario, a quantity of semi-hatched fish eggs of the following species, viz.: 2,500,000 whitefish from Sandwich, Ontario, and 1,500,000 salmon trout from Newcastle. These were put on trays and glass incubators in good condition; they did well, and in due time hatched out a good percentage of young fry, which were distributed in the various lakes and rivers throughout the counties in the lower sections of this province, and a portion of them in the the County of Temiscouata, Province of Quebec, as shown in the tabulated statement of the distribution hereunto annexed:

#### *Distribution of Whitefish Fry.*

April 13,	planted in	Oromocto Lake, York Co.....	240,000
do 20	do	Harvey Lake do .....	240,000
do 23	do	Magaguadavic Lake, York Co.....	240,000
May 1	do	Jones Lake, Carleton Co.....	180,000
do 4	do	Harvey Lake, York Co.....	240,000
do 12	do	Foster Lake, Charlotte Co.....	240,000
do 16	do	Portage Lake, Victoria Co.....	180,000
do 21	do	Squatook Lake, Temiscouata Co., P.Q.	360,000
Presented to private parties in this locality.....			20,000
Turned out at hatchery at the end of the season.....			60,000
			<u>2,000,000</u>

#### *Distribution of Salmon Trout Fry.*

June 17,	planted in	Jones Lake, Carleton County.....	80,000
do 22	do	Harvey Lake, York do .....	80,000
do 24	do	Skiff Lake, Carleton do .....	80,000
do 26	do	Quaker Brook Pond, Victoria Co.....	70,000
do 29	do	Oromocto Lake, York County.....	80,000
July 1	do	Foster Lake, Charlotte do ...	80,000
do 6	do	Magaguadavic Lake, York Co.....	80,000
do 8	do	Harvey Lake, do .....	80,000
do 6	do	Squatook Lakes, Temiscouata Co., P.Q.	120,000
do 14	do	Lake George, York County.....	70,000
do 17	do	Long Lake, Victoria County.....	65,000
do 18	do	Portage Lake do .....	60,000
do 18	do	Muniac Pond do .....	40,000
do 19	do	Meadow Lake do .....	60,000
Presented to different parties that applied for them.....			30,000
Turned out at the hatchery during the season.....			80,000

Total number of fry distributed ..... 3,165,000

This part of the work was performed with care, diligence and strict attention, without any appreciable loss, although the distances that portions of them were carried to was very long, as shown by referring to the names of the places where they were planted. During the balance of the summer months the usual amount of cleansing, arranging and putting all things in order for the winter work was carried on. The new metallic taps so kindly ordered by your superintendent for the use of this hatchery could not conveniently be put in their places in time to be used this



season, but will be arranged for next year's operations. With reference to the painting of the exterior of the hatchery, it was altogether too late in the season when orders were given to have it done. Next spring it will be done, and the roof should also be painted at the same time, as it would add materially to the durability of the shingles.

#### *Collecting Salmon Eggs.*

In the early part of the month of October last I was directed by the Superintendent of Fish Culture to make the necessary preparations to go to Carleton, at the St. John harbour, for the purpose of stripping the parent salmon, as there were three hundred of them in the Carleton pond, and also to put myself in communication with Mr. Joseph O'Brien, overseer of fisheries, who had them in charge. I did as directed, but Mr. O'Brien informed me that he had no knowledge when the fish would be ready for spawning, as he had never handled any of them from the time they were put into the pond. On the 24th of October I left Grand Falls for St. John; on the 25th I arrived at Carleton and called on Mr. O'Brien. We visited the pond where the salmon were confined. When the tide is in it is rather an extensive sheet of water, and when the tide is out there is still sufficient water for the support of a large number of salmon. At the outlet of the pond, where the iron grating was put to prevent the salmon from escaping, there is a large pool about twenty-five feet deep at low tide. When we arrived the arrangements for seining and stripping the fish were not yet completed, but in a couple of days everything was put in as good shape as it was possible under the circumstances. The weather was then very cold, and Mr. O'Brien rendered me every assistance in his power, and showed a willingness to bring the work to a speedy and successful termination. Mr. O'Brien's judgment and advice in all things pertaining to the work that we had in hand was most satisfactory. We began to strip the fish on the 28th October, and finished on the 10th November. The total number of salmon taken from the pond and manipulated was 319—females 234, males 85. From this number of fish about 1,600,000 eggs were obtained which were all carefully packed in boxes, or cases made expressly for the purpose. The method adopted was, that just as soon as sufficient eggs were spawned to fill three cases they were forwarded to the hatchery. On the 31st October I dispatched three boxes in charge of my son; and on the 7th November I took three boxes myself, and on the 11th I started with the last lot. They were all placed on the breeding trays in the hatchery in first class condition. The salmon in the pond were in excellent condition, healthy and smart, and free from disease of any kind that could be discovered, and they were all liberated apparently in as good condition as when first taken from the water, and not a fish was lost during the whole operation. The eggs looked well when taken from the fish, but of a much higher colour than those obtained from salmon in fresh water. This being my first experience with eggs taken from salmon that were kept continuously in salt water, I cannot offer an opinion as yet regarding them until they have some more time to develop than has yet transpired. I hope they will do sufficiently well to warrant the department in following up the same method of getting a supply of ova for this establishment each succeeding year, thereby doing away with the unpleasantness of the oft-repeated failures formerly experienced to secure anything like a sufficient quantity of eggs to stock this hatchery, and also to avoid the great hardship and exposure that had to be endured heretofore in these attempts. The increase of salmon on the Tobique River (as reported to me) would, I have no doubt, warrant more success for obtaining eggs in the future than in the past, if it should be thought proper to direct other attempts to be made there.

#### *Repairs on Hatchery.*

Very little repairs were needed or done about the hatchery this past year. The painting that was authorized to have done at the hatchery this season had to be postponed until next spring, as it was too late before the final instructions were



got. Some painting is being done to the interior of the house, which was much needed; the paint has been on hand and paid for since the summer. I would again urge that the roof of the hatchery be also painted; the shingles are showing signs of decay, and a good coat of cheap waterproof paint would preserve them for several years to come. It may be necessary to have some repairs done to the main dam this summer. It is likely the Canadian Pacific Railway Company will assist in having it done, as they are equally interested, as it is from it they get their water supply for their tank, which is close by the hatchery.

It would be very desirable to have the piece of ground belonging to the hatchery fenced in, in order to prevent any encroachment or trespass upon the property, such as placing lumber and other encumbrance thereon by parties who haul logs to the river every year, and also to prevent cattle running around the building and covering the ground with their filth. Having it fenced in would establish the department's rights and legitimate claim to the property.

#### *Increase of Fish.*

Referring to the increase of fish in the waters adjacent to this hatchery, and in the adjoining counties, I have to state that several of the worst skeptics are now compelled to acknowledge that the artificially hatched fish that have been distributed from this nursery has added materially to produce the very marked increase of fish in our waters, more especially the salmon, which had shown a great increase within the last two or three years, particularly last year. In order that it may be better understood, one or two instances in proof of this assertion will be given. About seven miles below this hatchery there is a stream called Salmon River, which in former years was a great resort for salmon, as its name indicates, but from over fishing and other illegal causes it became depleted. Since this house was established, about six or seven years ago, there has been planted in this river about three hundred thousand young salmon fry, and now large numbers of mature fish are returning, or attempting to return, to their native waters, but unfortunately for the poor salmon, the inventions of man have intervened, and a mill dam has been built across the stream about three miles from its mouth, and last summer the salmon were gathered in great numbers below the dam, and in several other places between the dam and the confluence of the stream with the St. John River, endeavouring to get up this stream, where as young fry they were first planted from this hatchery. In this situation they became an easy prey to the poachers, who are not slow to take advantage of their helpless position at low water. I have already brought this state of affairs to the notice of the department, recommending that a fish-way be put in said dam. It was understood some action was taken in the matter, and subsequently that the order was countermanded, which gives much disappointment. In like manner in the Tobique River, where several hundred thousand salmon fry has been annually planted for several years previous to the last two, salmon have become abnormally plenty. Mr. Allan, the lessee's head warden, reports that according to the nearest approximation he can make, he saw more than five thousand salmon on the Tobique River last summer. And in order to be in a position to give the lessees a correct answer as to whether the salmon would take the fly, he took his fishing tackle up to the Tobique, to the Seven Mile Pool, so called, and in fifty-five minutes from the time that he adjusted his flies, he landed two fine salmon. At a later date, a Major ———, from near St. John, captured forty-seven in the same pool with his fly; the largest fish weighed eighteen pounds, and the smallest thirteen and a-half pounds. Afterwards Mr. Cram and some others of the club caught thirty-seven in the same locality; no doubt other catches were made. The above statement of facts show an extraordinary change in the salmon fishing in the Tobique River. With my experience in four days' angling, previous to the planting of artificially-hatched salmon in the Tobique, it was a complete failure. Another proof of the good results derived from the introduction of salmon fry from this hatchery into the several rivers in this locality is the acknowledged increase in the size of the fish. Formerly the average weight of the salmon was ten pounds; at

present, from all the facts obtainable, the average weight would be about fourteen pounds. The increase in size is attributable to the salmon eggs brought from the Restigouche and Tadoussac and other hatcheries, where the fish are larger than they are here.

With reference to the whitefish and salmon trout fry distributed from this house, in the several lakes, it is not easy to obtain sufficient proof to fully illustrate what the increase really is, as the majority of the lakes are either held as private property or leased by some company for fishing purposes—and as a rule these parties will not permit any one to fish otherwise than with the fly; therefore, angling for these fish would be useless. But sufficient proof has been obtained to establish the matter beyond any doubt that both the whitefish and salmon trout are doing well, and multiplying. A man by the name of Holland, living at Harvey station, informed me that a gentleman from St. John, when fishing in Oromocto Lake, saw fish that would neither rise to the fly nor take bait; he was determined to know what they were, so he went home and secured a net and came back and captured quite a number of them, and they turned out to be whitefish, a class of fish that was never known to inhabit this lake before. In like manner a gentleman was fishing in the thoroughfare between the Magaguadavic lake and river of the same name, where he caught some very fine salmon-trout. Mr. Patrick Mulherin reports that when fishing for trout in Portage Lake he caught a dozen very fine salmon-trout. I have no doubt but that there is an abundance of these fish in the majority of the lakes where they were planted. I have had information of salmon-trout being caught in Chamcook and Skiff lakes—which have been supplied from the hatchery.

I beg to state that this hatchery is in first class order for the breeding of all classes of fish that we have been in the habit of handling heretofore, with facilities that will compare favourably with any other hatchery of its size in the Dominion.

All of the foregoing report is most respectfully submitted.

I have the honour to be, Sir,

Your most obedient servant,

CHAS. McCLUSKEY,

*Officer in Charge.*

GRAND FALLS, N.B., 31st December, 1891.

## 6.—MIRAMICHI HATCHERY.

### PROVINCE OF NEW BRUNSWICK.

#### REPORT OF THE OFFICER IN CHARGE OF THE MIRAMICHI FISH HATCHERY FOR THE YEAR 1891.

I have the honour to submit herewith the annual report upon the operations in connection with this fish-breeding establishment for the year 1891.

Referring to my report for the year 1890, it will be seen that there were placed in this hatchery during the autumn of that year 810,000 salmon ova, which were gathered from the native salmon of this river. I am pleased to be able to report that the most satisfactory results were met with in the hatching and distributing of fry from this stock of ova.

During the month of February I received 750,000 salmon trout or large lake trout ova from the Newcastle, Ontario, hatchery. These were placed in good condition in the hatching troughs of this establishment. Excepting a few which were frozen on the bottom trays of each of the boxes in which they were shipped, only a loss of about 30,000 took place. The balance were successfully hatched, and the fry from them were distributed in the waters recommended by the department. The work of distribution commenced on 4th June and extended to the 20th of that month.



The crop of Atlantic salmon were planted with the most satisfactory success in the following streams:—

North-west Miramichi and small tributaries.....	300,000
Little South-west Miramichi.....	225,000
Sevogle River.....	100,000
Main South-west Miramichi and small tributaries.....	145,000
Stewart's Brook.....	13,000
Total.....	<u>783,000</u>

The salmon or great lake trout fry were also successfully planted in the following waters, as they were the most suitable to which access could be had:—

Crocker's Lake.....	650,000
Head waters of North-west Miramichi.....	70,000
Total.....	<u>720,000</u>

This shows an output of 1,583,000 fry from this hatchery for the past season.

In addition to these I received 20,000 salmon fry from the Restigouche hatchery, on application of the Honourable M. Adams, which were planted on the North-West Miramichi River. When recommending streams most suitable, in which to plant salmon fry, I mentioned Stoney Brook, but on account of the hot days during the distributing season, could not do so, as the small streams along the "Portage Road," from which we used to procure fresh water, were completely dried up. Those that were reserved for this stream were afterwards forwarded to Boiestown to fill the application of Mr. J. Steadman, of Fredericton, but as he failed to send an expert to meet the fry at Boiestown, as previously agreed upon, it was found impossible to keep them at the railway station, they were planted in Texas River, a small tributary of the Main South-west Miramichi.

The attempt to introduce the great lake salmon trout of the west into our inland lakes of New Brunswick, is gratefully appreciated by the people, who are situated a long distance from the rivers; therefore the planting of these fry in Crocker's Lake this season will be carefully watched by the people in the vicinity, especially those most interested. If this experiment prove successful—and it no doubt will be—large demands will be made to stock the numerous lakes upon the head waters of the rivers in this section of the province.

#### *Repairs.*

Immediately after the distribution of the fry, repairing the supply pipes was commenced, in which a great many small leaks had recently appeared which diminished the supply of the water in the hatching troughs considerably. The dams of the supply and retaining ponds were thoroughly examined and repaired, as well as the pond for containing parent fish, which was refitted and enlarged. The interior of the hatchery was greatly improved by painting the woodwork and whitewashing the walls and ceilings. There will still be some repairs needed next summer. A new supply tank will have to be placed in the hatchery before another stock of ova is laid down. The ceiling of the hatching room, which is plastered, will require to be covered with pine boards, as the plaster is falling off and injuring the ova in the troughs beneath. The walls from the bottom of the hatching troughs to the floor will have to be treated in like manner, as the dampness causes all the plaster to fall off, leaving them unsightly and not at all frost-proof. A very heavy rain storm has swept over this part of the country during the past few days, which has caused very heavy freshets in all the streams. The ice, which was about a foot in thickness, has broken up in this brook, and while large bodies of ice were passing through the retaining pond it carried away part of the enclosure used for impounding parent fish, sweeping with great force against the



top works of the dam, which were damaged considerably. The supply dam has not yet sustained any serious injury, but the full extent of the damage to either dams cannot be ascertained until the water, which is yet at its highest point, has receded to its usual height. With the exception of these matters, this hatchery and its appliances are in good condition.

#### *Capture of Parent Salmon.*

Owing to the failure of fully stocking this nursery with ova in the fall of 1890, the subject of procuring parent salmon, during the summer season, was again brought up. According to instructions, I consulted with Mr. Alex. Mowat on the subject, and as he has had much experience in the work of capturing the early ova of salmon for breeding purposes, his assistance was invaluable. From his experience in the work and acting on our joint judgments, we concluded that the place, which had been previously spoken of just below the bridge and dam, for retaining the fish after being caught, was altogether unsuitable. The upper section of the river was then searched for a situation somewhat similar to that occupied by the Restigouche reservoir, and finding what appeared to be a very suitable place, rough plans of the locality were sent to the department, showing the situation for a reservoir, and the setting of nets, together with an explanation of the appliances needed for successfully working them; also an estimate of expenditure which would probably be incurred, in putting everything in good running order; getting no instructions to proceed with this work, everything was got in readiness to procure parent salmon as in previous years, and on the 1st of September operations were commenced, and were completed about the 25th of October with the most gratifying results. The river was swarming with fish, and as the water was of a medium height nearly all the season the nets could be worked nearly every day. To this favourable state of the water, coupled with efficient protection against poachers, can the success of procuring this full supply be greatly attributed. In previous years, if the water in the river was at a height at which fishing could be carried on, poachers would seek every pool, thereby causing it to be very difficult to obtain a full supply of parent fish for the hatchery.

The total number of salmon taken was 435. From the net on the North-west Miramichi there were obtained 190 females and 110 males; from Little South-west 70 females and 65 males, making a total of 260 females and 175 males. On account of receiving slight injuries in the nets, ten females had to be liberated before spawning season, leaving a balance of 250 from which to gather the supply of ova.

#### *Collection of Ova.*

Stripping or spawning the fish began on the 22nd October, and the work continued till the 10th of November. It was observed that about sixty of the fish placed in the retaining pond differed greatly in size and general appearance from the others. So marked was the difference that there was no hesitation in giving the opinion that they were the salmon of the Restigouche, and were the results of the planting of fry from the Restigouche hatchery in the head waters of the Miramichi. From these larger females an average of about 9,000 eggs were obtained, while from the smaller salmon an average of only 6,000 was collected. The general average collected from all amounted to 6,500, giving a total of 1,625,000, which were placed in the hatchery in good condition.

Although this number of ova can be accommodated during the winter months, later on, at the hatching time, it will be almost impossible to successfully hatch out such a large number in the limited space of this establishment. The trough room will be taxed to its utmost capacity when 1,200,000 fry are hatched therein. Therefore it will be necessary to remove at the proper time about 400,000 to other hatcheries that have not a full supply.

In conclusion, I may say that the ova are in a very healthy condition, and as this hatchery and its appliances are in good order, the satisfactory distribution of a large number of fry from it can be looked for during the coming season.

Appended are letters from some of the principal fish dealers of the Miramichi, as well as other evidences, pointing to the beneficial results derived from artificial culture of salmon at this institution. (*See page 18.*)

I have the honour to be, Sir,

Your obedient servant,

ISAAC SHEASGREEN,

*Officer in Charge, Miramichi Hatchery.*

## 7.—RESTIGOUCHE HATCHERY.

### PROVINCE OF NEW BRUNSWICK.

#### REPORT OF THE OFFICER IN CHARGE OF THE RESTIGOUCHE HATCHERY, 1891.

I beg to submit a detailed report of the operations carried on at the Restigouche hatchery for the season of 1891.

As already reported, 1,800,000 eggs were gathered in the fall of 1890 and safely conveyed to the hatchery at Dee Side, from which 1,650,000 were successfully hatched and planted, as per instructions, in the various waters, as follows:—

June 24—Kedgwick River.....	400,000
June 29—Main Restigouche, from Indian House to Kedgwick.....	200,000
July 2—Main River, from hatchery to Indian House. ....	260,000
July 6—Upsalquitch River above the Great Falls.....	200,000
July 6—Main River, in vicinity of hatchery.....	200,000
June 17—Bonaventure River, P.Q.....	100,000
July 1—Miramichi River.....	20,000
July 3—Nepissiquit River.....	100,000
July 6—Parker's Lake.....	20,000
July 7—Métapedia River.....	150,000
Total.....	<u>1,650,000</u>

The above numbers of fry were all planted in a healthy condition. The planting of those in the Nepissiquit and Bonaventure rivers was assisted by the lessees, Messrs. W. H. Thorne and J. De Wolf Spurr, Esq., of St. John—who provided men and canoes by my superintending the work.

Mr. Spurr feels quite satisfied that he is already reaping the benefits of the fry that were planted in the Nepissiquit River from the Restigouche hatchery in former years, as a number of large salmon of the Restigouche species were caught this season.

I regret being unable to report a larger catch of fish this season in the Government nets, which I here give in detail.

## CATCH of Fish in Government Nets.

Date.	Murray Island Net. Number of Fish.	Pitt's Creek Net. Number of Fish.	Melvin Adams Net. Number of Fish.	Number of Fish Sold and Credited to Dept.
June 6.....	1			
do 7.....	5			
do 8.....	1			
do 9.....	1		3	
do 10.....	3			
do 11.....	1		1	
do 12.....				
do 13.....	4			
do 14.....	3			
do 15.....	4			
do 16.....	4			
do 17.....	2		5	
do 18.....	6	8	18	
do 19.....	3	3	9	2
do 20.....	5	13	4	
do 21.....	14	16		
do 22.....	12	9		
do 23.....	16	2	2	4
do 24.....	15		1	3
do 25.....	16	5		4
do 26.....	9			
do 27 (Saturday. No nets lifted).....		2	1	
do 28.....				
do 29.....	8	2		1
do 30.....	6	2		
July 1.....	1	1		3
do 2.....	6	4		
do 3.....	7	6		
do 4.....		3		4
do 5.....		3		
do 6.....				
do 7.....	2		1	
do 8.....	2			
do 9.....	5			
do 10.....	4			
do 11.....	5			
do 12.....			1	
do 13.....			1	
do 14.....				
do 15.....				
do 16.....				
do 17.....				
do 18.....				
do 19.....			1	
do 20.....				
do 21.....		3		
do 22.....	1	1	1	
do 23.....	2	2	1	
do 24.....		3	1	
do 25.....	1	2		1
do 26.....	1			
do 27.....		1		
do 28.....				
do 29.....				
do 30.....	1	1		
do 31.....				
Total.....	177	92	51	22

It will be observed by the above table that there was a total of 320 fish caught in the two Government nets, including 51 purchased from Mr. Adams. After deducting those that were lost and sold, there was left a total of 295 spawning fish, 131 females and 165 males, from which were collected 1,416,500 eggs. These eggs



were packed in trays and conveyed to the hatchery without loss. The embryos are quite visible at the present time, giving every evidence that a successful hatching may be looked for. Spawning began on the 20th of October and continued up to 10th of November.

It will also be noticed by the above table that 51 fish, at a cost of \$127.50, were purchased from Mr. M. Adams, whose net is situated in the north channel adjacent to the Government nets. Although paying Mr. Adams \$2.50 per fish, some two or three cents per pound more than the current market rate, he was unable to give more than 51 fish. Let us compare this with the catch of the Government nets. The Murray Island net took 179 salmon. The Pitt's Creek net took 94. Yet neither of these nets had the same chance as Mr. Adams' net, which is below them, and takes a portion of the north channel. But Mr. Adams does not use 2-inch mesh nets. He claims if he did it would ruin his fishery, as the fish will not go into them. Therefore, only a portion of his catch is obtained. And so with the Government nets: where small mesh nets are wholly used the catch is 50 per cent less than if they were fished with the large mesh nets which the licensed netters use. I may mention that in 1887 we arranged with nine licensed stations to get parent fish, paying them \$2 and \$2.50 per fish. After fitting out their nets with fine meshes and fishing for one season they all discontinued this mode of fishing, for the reason that the fish would not enter their small mesh traps, and their catch was 50 per cent less than formerly.

Regarding the number of fish that may be lost, any person having knowledge of net fishing knows that where 300 or 400 fish are taken alive an odd one or so will become entangled in the nets and die, even though all small mesh nets are used, and this invariably occurs at the time of a big storm. When these dead fish are discovered they are sold to the dealers and credited to the department.

The hatchery is in first-class condition; the interior received a coat of paint and the walls whitewashed during the past season, and the building strengthened with iron rods, to prevent spreading, and everything put in readiness for the reception of the ova in the fall.

#### *The Retaining Pond at the Hatchery.*

As I have described the size and condition of this small pond for retaining salmon fry in my former reports, it will only be necessary to say the first fry were planted in it in the spring of 1888. This summer hundreds of two and three-year-old salmon were to be seen, the three-year-old being about 7 inches in length, fully developed and ready for migration to sea. I have already stated that it would be very uncertain and expensive work to retain large numbers of these fish until three years old. I am of opinion that the greatest destruction does not take place in the fry stage, but after the little fish leave the river and migrate to sea, where they remain two or more years before they return, and as it is pretty well known that the salmon family move about in schools in the sea, other fish of a voracious nature prey largely upon them. However, as the Restigouche Salmon Club contemplate constructing a pond at Metapedia the coming season, with a view of trying to retain a number of the fry for six months or more, I would suggest that the club be supplied with fry from the Restigouche hatchery for the experiment.

#### *Repairs to Nets and Retaining Pond, 1892.*

As no new nets were obtained last season it will be necessary to replace the old ones by a new set this year; also, 300 or 400 new net stakes will be required, and also some repairs to the reservoir, and some new netting, etc., all of which will cost some \$250 or \$300.

#### *Suggestions for the better Preservation of the River.*

Restrict the number of rods on the river, and the anglers to a given number of fish—that is, not to allow any one man to kill more than a certain number of salmon, or else curtail the angling season to 15th of July instead of 15th of August.

Abolish the destructive trap-nets below Dalhousie. These nets are an imposition on the general public, and unfair to all other netters and anglers above them. They

should be compelled to obey the Sunday close time, which would place them on an equal standing with their brother fishermen on the Quebec side of the bay.

The Dominion fishery officer here should be equipped with a small steam yacht to see that these fishery regulations are carried out. Until something of this kind is done no great improvement in the river fishery need be looked for.

I annex a few letters from some of the net fishermen, giving their views and results of catching live fish. (See page 20.)

I have the honour to be, Sir,  
Your obedient servant,  
ALEX. MOWAT,  
*Officer in Charge.*

8.—GASPÉ HATCHERY.

PROVINCE OF QUEBEC.

REPORT OF THE OFFICER IN CHARGE OF THE GASPÉ HATCHERY, 1891.

SIR,—I beg to submit the annual report of operations connected with the above hatchery during the past year.

Work in Dartmouth River was commenced on 11th of May, when preparations were made for the summer. Scows and flats were repaired and other necessary work was carried out.

The sphere of our work embraces the three rivers :—St. John, York and Dartmouth, all flowing into the south, and west of Gaspé Bay.

Our operations are solely concerned with salmon, and all were liberated in excellent condition.

The planting was commenced on 15th of June and completed on 16th of July. The following shows the number of salmon fry bred and put out during the year :—

York River .....	200,000
St. John River.....	200,000
Dartmouth River, above fall.....	450,000
do below falls... ..	150,000
Total .....	1,000,000

Notwithstanding the fact that the majority of the Dartmouth fry had to be conveyed at the cost of much labour above the falls, it was satisfactorily done. This operation was ordered by the superintendent. Though involving an expense beyond the previous outlay, it appears to be justified by its more effective results.

The department nets were set from 6th of June to the 6th of August in the Dartmouth River, and captured 82 parent salmon. According to instructions, I purchased 30 more from William Stanley at the current price of \$2 each, making 102 in all. When seined and cribbed 30th October 95 remained. Of this number there were found to be 64 females and 31 males. The spawning continued from 1st of October to the 4th of November, and the 64 females produced as follows :—

30 females averaging 17,000 .....	510,000
16 do do 15,000.....	240,000
18 do do 14,000.....	252,000
Total.....	1,002,000

We thus obtained a total of 1,002,000 eggs, which were placed in the hatchery in good condition.

*Condition of Hatchery.*

The hatchery itself is in first-class condition. I had the outside of the building painted during the month of September at a cost of \$29.



The trays and troughs were varnished, and subsequently the interior of the hatchery was painted, cleaned and aired, and appliances fully prepared for the winter labour.

The damage done to our trap-net and boom in Dartmouth River, in August, was repaired this spring at a cost of \$15; also the dam in rear of hatchery repaired at a small cost. The department trap-net was set this year as last. Anglers are well satisfied with the net. The close season is observed, by reports from guardians and other persons.

St. John's River, York and Dartmouth are well stocked with salmon in their upper waters. So far as I can ascertain, the number of salmon captured this season in gill-nets on the sea coast and at the mouth of rivers is equal to last year's.

I purchased from F. Eden 8 tons of coal for the benefit of the hatchery, at cost of \$5 per ton; total \$40.

I find our present mode of capturing parent salmon for the Gaspé hatchery too limited. I would like to see a greater number of salmon bought yearly.

Therefore, I would suggest and recommend the department to occupy the fishing station of William Stanley, at the mouth of the Dartmouth River, and to put another trap-net there for the benefit of our hatchery. This second trap, probably, would give us the full number of fish we require.

A few salmon were taken out of our pond 28th June by Dartmouth River poachers this season. In order to make the pond more secure, and for the safety of our fish, I would recommend that all trees and brushwood be removed from the south side of pond, to give the guardians a full sight of the pond at night.

I have the honour to be, Sir,

Your obedient servant,

HENRY DAVIS,

*Officer in Charge of Gaspé Hatchery.*

## 9.—TADOUSSAC HATCHERY.

### PROVINCE OF QUEBEC.

#### REPORT OF THE OFFICER IN CHARGE OF THE TADOUSSAC HATCHERY, 1891.

SIR,—As requested by your circular, I beg to submit my annual report of the operations carried on at the Tadoussac hatchery for the past year.

From the crop of salmon eggs obtained in the fall of 1890, about 1,300,000 fry were distributed in lakes and in the tributaries of the Saguenay, with the assistance of a tug boat belonging to Messrs. Price Bros. & Co.

Following is a list of the rivers and lakes, with the approximate number of fry planted in each; exact figures are wanting, as all my books were destroyed in August last at the burning of my dwelling house:—

Shipsaw River.....	250,000
À Mars River.....	250,000
St. John River.....	200,000
Mowat's Lakes.....	550,000
Hatchery Lakes .....	50,000
	<u>1,300,000</u>

As usual, our two departmental nets were set in May and caught 650 salmon. Of that number, 300 parent salmon were kept in the pond, and the balance (350) of the small size were liberated. The 200 females of the number of parent salmon gave 1,800,000 eggs, now on the trays in the new building erected this fall. This new building, 102 by 32 feet, is beautifully situated on the hill and well lighted. We get our supply of water right from the hatchery lake by an iron pipe, thus saving the expenses of two dams, as was the case with the old building. This new building with all the apparatus is certainly a first-class one.



The salmon fishing this season has been still better than last year by a few thousand pounds more, notwithstanding last year net-fishing was considered very good and unprecedented. All the salmon rivers, tributaries of the Saguenay, are well stocked with parent salmon, as shown by all the reports of the guardians. Now the opinion is general that this increase must be largely credited to the Tadoussac hatchery. No doubt the hatching of salmon has passed beyond the experimental stage to that of demonstrated success. Large quantities of salmon fry have been turned out from this Tadoussac nursery for the last ten years, and the benefit has already been seen by the large increase in the catch of salmon for the last few years, and I hope the Department of Fisheries will do all in its power to continue the good work and will increase the number of fish-breeding establishments in the Province of Quebec and throughout the whole country. In this line your department could use with advantage the windows and doors and some of the apparatus of the old building, to put up a small auxiliary hatchery on one of the fine streams of the Upper Saguenay, thus saving much money in the distribution of fry in the spring. By doing this a large quantity of fry could be planted far up the river at very little cost. I would recommend for such auxiliary hatchery two beautiful streams of the purest water—one is called Bear River and the other Des Aulnets River, both running into the Saguenay, about fifteen miles above Chicoutimi. Both rivers are navigable for canoes for about fifty miles, and each have on them small falls, from which water for the hatchery could be supplied at very little expense. From Bear River or Des Aulnets River, if wanted, the distribution could be done in a couple of hours, in two large salmon rivers, the Shipshaw and the Caribou rivers. An expense of \$300 would be sufficient to put up a good building to hold one million of eggs. It will cost that amount every year to make a good distribution in the Upper Saguenay from the Tadoussac hatchery.

As reported before, we have already picked out a considerable number of bad eggs; the disease spreading over the eggs is absolutely the same as reported last year.

To fill up our new building with eggs, next season, we will require more trays; we have enough paraffine varnish to give two good coats to the troughs. We require also for next season a long boat to tow the scows from the fishing stations, and a new set of nets; also, a good long boat can be made on the same model of the old one for \$90. The boat required must be made very strong.

I have to mention that by taking the water direct from the lake by the iron pipe there is a difference of three degrees in the temperature of water in the troughs in this new hatchery. It was 34 degrees last winter in the old hatchery, and this winter it is 37. This change is occasioned by the water being brought in a shorter underground pipe direct from the lake, whereas before it had to run in a long dale exposed to cold.

I have the honour to be, Sir,

Your obedient servant,

L. N. CATELLIER,

*Officer in Charge.*

I enclose extracts from letters sent to me.

Mr. L. N. CATELLIER, Esq.,  
Tadoussac.

*(Translation.)*

SIR,—You will probably be glad to hear that we see a great number of young salmon of about four to five inches long on the Dechéne's river, where you put some young fish last summer, but unfortunately the little boys of the place have great pleasure in catching a great many of them; it would be worth while to keep a guardian to protect them.

CORRIE PEDNAULD.

L. N. CATELLIER, Esq.,  
Tadoussac.

(Translation.)

SIR,—The fly salmon fishing has been abundant this year. I caught myself a good number in a small part of River à Mars belonging to me. The Messrs. Price and their friends, who come down every year to make the salmon fishing in that river, have caught a great deal more salmon than in the previous years. It is well known there for a few years past the young salmon from 4 to 10 inches long have increased considerably in the river; it is evident that this great increase is due to the salmon fry placed in that river every year from your establishment in Tadoussac. It is to be desired that the Department of Fisheries will continue in future such a good work as in the past.

O. COTÉ, M.P.P.

Mr. L. N. CATELLIER,  
Tadoussac.

(Translation.)

SIR,—Now that you have a very good large building for the hatching of salmon eggs, I hope you will do your best with the Department of Fisheries to fill up the two stories of your building with salmon eggs. There is no more doubt about the good results of your fish-breeding. I have very often occasion to speak with the net fishermen about salmon fishing, and they agreed to say that the large increase in the catch of salmon for the last few years is due to your work, and is the best proof of the Tadoussac hatchery. In supporting those fish-breeding establishments, the Government is doing a great work in the public interest.

Yours truly,

OMER BOULIANNE.

## 10.—MAGOG HATCHERY.

### PROVINCE OF QUEBEC.

#### REPORT OF THE OFFICER IN CHARGE OF THE MAGOG HATCHERY, 1891.

SIR,—I beg leave to submit the following annual report of the work of the Magog hatchery for the year 1891.

On the 26th day of February last there were received from the Newcastle hatchery, Ontario, and deposited in the Magog hatchery, 1,500,000 whitefish and 1,800,000 salmon trout eggs in first class condition. They were successfully hatched out, and deposited as follows:—

Name of Water.	Salmon Trout.	Whitefish.
Megantic Lake, Compton County.....	200,000	100,000
Oxford Lake, Compton and Brome Counties	200,000	200,000
Brome Lake, Brome County.....	150,000	100,000
Massawippi Lake, Stanstead County.....	200,000	200,000
Memphremagog Lake, Stanstead and Brome Counties.....	700,000	470,000
Baldum's Pond, Stanstead County.....	200,000	200,000
Lovering's Pond.....	75,000	50,000
	<u>1,725,000</u>	<u>1,325,000</u>

The small fry came out strong and healthy, the mortality being less than at any former period. The salmon trout were enabled to remain in the tanks until the sack was entirely absorbed—owing to the low temperature of the water.



I have made inquiries from fishermen regarding the increase of salmon trout and whitefish in the several sheets of water where they have been planted, and they assure me that in many instances the increase is very perceptible, especially with the salmon trout and bass, in Memphremagog Lake. I have asked for written statements, and when received will duly forward them. All of which is respectfully submitted.

Your obedient servant,

A. H. MOORE,

*Officer in Charge.*

## 11.—NEWCASTLE HATCHERY.

### PROVINCE OF ONTARIO.

#### REPORT OF THE OFFICER IN CHARGE OF THE NEWCASTLE HATCHERY, 1891.

I have the honour herewith to submit a report of the fish cultural operations carried on at the Newcastle establishment during the past year.

The several kinds of fry hatched at this nursery last spring, viz., salmon trout, whitefish and speckled trout, were most satisfactorily distributed. In no instance was any loss met with worthy of mention. I am of the opinion, however, that it would be wise on the part of the Government if they ordered larger supplies of fry to be planted in a lesser number of localities, thus lessening the number of distributing points. This plan would not only save expense, but materially aid the hatchery in showing greater results from its operations. On several occasions in my annual reports I have suggested the advisability of this being carried out. If a few important waters were stocked with, say, several millions of fry for three years in succession, I feel satisfied that a decided and marked improvement in the fishing industry of those waters would be noticed; but with the present adopted method of trying to please all applicants, and placing only a few thousand fish in numerous lakes, sometimes situated long distances from the hatchery, does not by any means give the industry an opportunity of showing to the department and the people generally such practical results which could be otherwise obtained in the course of a few years' time.

The following schedule will show the points of distribution, also the number and kinds of fry placed in each locality last spring:—

#### *Salmon Trout.*

Lake Ontario, Kingston.....	300,000
do Toronto .....	300,000
do Newcastle.....	400,000
do Bowmanville ..	300,000
do Cobourg .....	200,000
do Hamilton .....	200,000
do Consecon.....	200,000
do Colborne.....	200,000
Bay of Quinte, Colborne.....	300,000
Georgian Bay, Wiarton.....	500,000
do Meaford.....	300,000
do Collingwood.....	300,000
do Owen Sound.....	300,000
Matchdash Bay, Waubashene..	100,000
Lake Simcoe, Barrie.....	100,000
do Orillia .....	200,000
Lake Couchiching, Orillia.....	100,000
Small Lake, four miles north of Colborne.....	50,000
Lake Joseph, Muskoka...	200,000
Carscallen's Lake, Marmora.....	100,000
Wilson's Lake, Holloway.....	100,000
Total.....	<u>4,750,000</u>



*White Fish.*

Lake Ontario, Toronto.....	500,000
do Port Hope.....	150,000
do Cobourg.....	150,000
do Newcastle.....	250,000
do Bowmanville.....	250,000
Bay of Quinte, Belleville.....	500,000
Lake Simcoe, Orillia.....	300,000
do Barrie.....	300,000
Matchdash Bay, Waubashene.....	300,000
Total.....	2,700,000

*Speckled Trout.*

R. Williamson, Ingersoll.....	5,000
Judge Chadwick, Pt. Shelburne Club.....	60,000
R. Hulme, Belleville.....	10,000
Charles Armstrong, Hamilton.....	5,000
C. A. Bowman, London.....	5,500
Cyrus Teal, Wooler.....	5,500
Henry Crozier, Orangeville.....	15,000
W. Rittenhouse, Beamsville.....	5,500
Thomas Ford, Credit Forks.....	40,000
H. McWilliams, Guelph.....	10,000
Thomas Goldie do.....	10,000
E. H. Berdan, Talbotville.....	5,000
R. J. McCormack, Waterford.....	10,000
R. Von Puch, Berlin.....	2,000
H. H. Collier, St. Catharines.....	5,000
Z. A. Lash, Pt. Shelburne Club..	50,000
Z. A. Lash, Pt. Orangeville Club.....	50,000
David Martin, Guelph.....	15,000
A. White, Crown Lands Department, Toronto.....	20,000
F. Wright, London.....	20,000
Pond at hatchery, Newcastle.....	10,000
Total.....	357,500

## SEMI-HATCHED EGGS SHIPPED TO OTHER HATCHERIES.

*Salmon Trout.*

Ottawa hatchery, Ottawa, Ont.....	1,500,000
Magog do Magog, Qué.....	2,500,000
Miramichi do South Esk, N.B.....	750,000
Bedford do Bedford, N.S.....	750,000
St. John do Rapide des Femmes, N.B.....	1,500,000

*Speckled Trout.*

Ottawa hatchery, Ottawa, Ont.....	100,000
Total.....	7,110,000

*Total Number of Fry Hatched and Eyed Eggs Shipped from Newcastle to other Hatcheries.*

Salmon trout fry.....	4,750,000
Whitefish fry.....	2,700,000
Speckled trout fry.....	357,500
Salmon trout eggs.....	7,000,000
Speckled trout eggs.....	100,000
Grand total.....	14,917,500

*General State of Repairs of Fish Hatchery.*

Notwithstanding that this establishment has been in existence for a great number of years, the main building is in very good condition. The reservoir or supply tank in the lower hatching room should be repaired next summer. The wood is considerably decayed and allows a leakage of water to ooze out and run over the floor, which causes a continued dampness in the room. The outside of the building should also be painted as soon as the weather is favourable to have this work done. In connection with the main building there is a long shed 75 by 20 feet, used for coal bins and storage of hatching appliances, etc. This structure is very old and in bad condition and should be pulled down. A very much smaller "lean-to" or shed could be erected for storage of coal, etc., which should not cost more than \$200. Something must be done to this building early next spring. In its present condition it is unsafe to use it.

The grounds and ponds connected with this establishment have been kept in good order during the past summer. Last fall I received instructions to abandon all efforts to raise black bass, and not to expend any money upon the maintenance of the grounds connected with the hatchery. This decision on the part of the Fisheries Department will, I feel sure, be deeply regretted by the large number of people who visit the place during the summer months. The grounds have always been well kept and the grass regularly cut, with a view of inducing all visitors to take an interest in the fisheries.

The grounds are very picturesque and should not be allowed to run wild, especially as their maintenance costs a mere nothing. The regular employes of the establishment have always looked after and kept the place in order.

*Marked increase of Salmon Trout and Whitefish in Lake Ontario.*

This important lake, which for a long time seemed almost depleted of the better classes of fish, is now showing signs of marked improvement. Whitefish and salmon trout were caught last summer by means of gill nets off Bowmanville, Newcastle, Port Hope, Cobourg, Brighton, Picton and Belleville in larger numbers, so much so, that it is the intention of a number of the Georgian Bay and Lake Huron fishermen to apply for licenses to fish in Lake Ontario next spring, at the points above mentioned, where they consider they can do better than on the old and somewhat fished-out stations on the upper lakes. This marked increase of fish in Lake Ontario must be at least partially attributable to the large quantities of fry which have been annually planted there in a most healthy state from the Newcastle nursery during the past 8 or 10 years. If desired by the department, many testimonials to this effect could be obtained from fishermen and other interested persons who are well aware of these facts.

*Collection of Salmon Trout Eggs at Wiarton last fall.*

This work was carried on under my personal oversight, and I regret to say that there was a considerable falling off in the number of eggs collected when compared with the operations of the two previous years. The principal cause of this may be largely attributed to the very great scarcity of parent fish entering the pound nets.



Fully four times as many fish were captured in 1889 and 1890 as this year. The Indians at Cape Croker, I am informed, were allowed the privilege of fishing by means of gill-nets last fall during the close season, and as their reserve takes in Hay, Griffith and White Cloud islands, which are situated in the very mouth of Colpoys Bay, the large quantity of nets used by these Indian fishermen not only captured but also otherwise prevented many parent fish from entering Colpoys Bay for the express purpose of spawning. It is therefore natural to suppose that many of the fish leaving the deeper waters of the lake with the instinctive idea of returning to their old ground in Colpoys Bay are prevented from doing so, especially as they must pass around and through these islands when entering the bay where the departmental nets were set.

I regret to have to report that the privilege lately granted these Indian fishermen "to take fish during the close season for their own use" is much abused, and that they not only supply themselves with fish food for winter consumption, but they salt and sell in a fresh and frozen state large quantities of these pregnant fish for marketable purposes which have been taken during the close season or spawning period. If some stringent measures are not adopted to prevent this wholesale slaughter, which was certainly carried on last fall in the neighbourhood of these islands, and only a mile or two from where the Government pound nets are set for collecting eggs, it will be next to an impossibility to procure an ample supply of ova at the present stations near Wiarton to stock the several hatcheries in the Dominion. By an examination of the "daily statement" hereto attached it will be noticed that the pound-nets were set this season much earlier and were also left in the water longer than in any previous year. It would therefore naturally be expected that a larger number of fish would enter them; however, this was not the case. Every possible effort was put forth to collect the usual supply of eggs, but owing to the scarcity of parent fish and the killing of them by the Indians we could not possibly get them. In order to show the great anxiety in this matter, I might mention the fact that we were compelled to gather the eggs every Sunday during the whole season. Yet it was impossible to collect a full quota. Only 5,545,000 were obtained this season, whereas 11,000,000 were secured in 1890, and 13,000,000 in 1889.

The nets used are located nine miles down the bay from Wiarton, but unfortunately in the case of rough and windy weather they cannot be reached. I would, therefore, suggest that a suitable shanty be built on the point opposite where the nets are set, for the men to live in during the period of setting the nets and collecting the eggs. If this were done it would be a great saving of expense. For instance, the men who assist in the collection of eggs could then alternately act as day and night guardians, thus saving two men's wages, also a reduction for board during the season. The whole staff of men could be boarded there much more cheaply than at an hotel at Wiarton. The item of tug hire (this year \$160) could in this way I think be reduced to \$100, as it would only be required when setting the nets at the beginning of the season and, say, once a week, to bring the eggs to Wiarton when ready for shipment to Newcastle. Besides the saving of expenses, which would be considerable, the men would always be in the vicinity of the nets ready to "lift" and take the eggs early in the morning and at all times of the day at a moment's warning, when the weather and sea might be favourable for going out to the nets.

Situated as we now are, nine miles away from the grounds, we often start out in the morning with favourable weather and by the time the tug reaches the nets the wind has changed and the sea runs so high that it is utterly impossible to "lift" that day. I would therefore strongly urge the department to take this matter into consideration, with the view of adopting it next fall. A suitable frame building could be erected at the point mentioned for \$250, and the outlay would more than pay for itself the first season in items of board of men, tug-hire and reduction of hands required to carry on the work.



*Report of Operations at Georgian Bay.*

Instructions were given last fall to have the pound nets set and ready to capture salmon trout as early as the 15th of October, in order to ascertain whether or not the fish spawned in the latter part of that month.

The statement attached to this report shows the daily operations during the whole close season of 45 days, less the time taken up in setting the first nets, and it will be noticed that few eggs were ripe or ready for impregnation before the 28th of October. On this date 400,000 were collected. It has always been found in the neighbourhood of Wiarton and Meaford, where a large number of parent fish have been handled during the past 10 years, that very few eggs could be obtained before the 29th or 30th of October, and that the fish as a rule did not spawn fully before the 5th or 6th of November. It is a fact, however, that salmon trout and whitefish spawn later in some localities than they do in others.

As it may be interesting to the department, the following views are given upon the matter of a proper close season, based upon the experience of some twelve years collecting eggs at different points on Lake Ontario and Georgian Bay, which shows that a close season, suitable and protective in one place, is not wholly suitable at another point. This decision has no doubt been arrived at by the Fisheries Department, and, in order to take in, or cover, the spawning period in all important waters, the Government wisely extended the protective period from thirty to forty-five days, namely, from 15th October to 30th November. In Lake Ontario the majority of salmon trout spawn between the 15th and 30th October, whilst in the upper portions of the Georgian Bay and Lake Huron they begin spawning even earlier than the 15th October, and have finished by the 15th November; but in that portion of the Georgian Bay which extends from Collingwood to Wiarton, and even further up the bay, nearly all the salmon trout deposit their eggs in the month of November. There is at present a great diversity of opinion amongst the fishermen as regards a just and properly arranged close time. Their whole aim, however, at present, is to induce the Government to do away entirely with protection, whilst, on the other hand, the Fisheries Department is striving to arrive at a general close season which will cover the whole time of spawning for these valuable fish throughout the Dominion, viz., 45 days. With this lengthened period the fishermen generally are very dissatisfied, and are protesting seriously against it. In those localities where the fish do not spawn before November they claim that it is unjust to shorten the open season, especially as they cannot reach the fishing grounds before the ice goes out of the lakes in the spring, and, therefore, they have only about five months to operate.

It is therefore suggested as a remedy to the fisherman's present grievance that the department send some competent and practical persons next fall to thoroughly investigate the matter.

A general feeling prevails amongst certain classes of fishermen that forty-five days' close time is too long, as they are now cut out of fifteen days, which seriously injures their business. From the long experience obtained connected with the collection of fish eggs, and the fisheries interests generally throughout this province, the conviction comes to is that it would be a bad policy to do away with the "close season" and thus gratify the wishes of a certain proportion of our fishermen. A proper rigidly protected "close time" should be enforced and maintained, notwithstanding the many protests against it.

I have the honour to be, Sir,

Your obedient servant,

C. WILMOT,

*Officer in Charge of Newcastle Hatchery.*

STATEMENT showing the daily operations of collecting Salmon Trout Eggs at Wiarton during the Season of 1891.

Date of lifting Nets.	No. of Nets lifted.	No. of Fish from which Spawn was collected and liberated.		No. of Fish Spawned out before entering Nets and liberated.	No. of Fish found injured or dead in Nets.		No. of Eggs collected.	General Remarks.
		Males.	Females.		Whitefish.	Salmon Trout.		
Oct. 15...								Drove remainder of stakes for No. 1 net.
do 16...								Finished setting No. 1 net and loaded stakes for No. 2 net.
do 17...								Went down to drive stakes for No. 2 net, but weather too rough.
do 18...								Sunday.
do 19...								Could not work; wind blowing from N. E. Kenefick wired me that fish were not ripe yet.
do 20...								Lifted No. 1 net; 300 in it. Only a few of the fish ripe for spawning.
do 21...								Finished driving stakes for No. 2 net and got it ready to set.
do 22...								Set No. 2 net and tried fish in No. 1 net; found them not fully ripe.
do 23...								Started to rebuild shanty between nets.
do 24...								Finished building shanty. Tried fish in No. 1 net; not ripe enough.
do 25...								Sunday.
do 26...								Fish in nets not ripe.
do 27...								Blowing hard from N.E. Could not lift nets.
do 28...	2	44	102	7	7	9	440,000	Fine warm day; rest of the fish not ripe for spawning.
do 29...								
do 30...								Went down to nets, but could not lift; wind and sea running high.
do 31...								Could not lift; blowing hard from south.
Nov. 1...	2	41	120	11	5	10	400,000	Fine warm weather.
do 2...								Fish in nets not ripe; repaired scow.
do 3...	1	3	10	5	1	3	20,000	Lifted No. 1 net. Fish not ripe, and, therefore, did not lift No. 2 net.
do 4...								Fish not ready; did not lift.
do 5...								Weather rough; could not lift.
do 6...	2	191	309	17	5	19	1,100,000	Fish spawning freely; few males. Weather fine.
do 7...								Fish not ripe for spawning.
do 8...	2	100	237	41	6	17	575,000	Warm weather; the majority of fish in nets not ripe.
do 9...								Fish left in nets not ripe.
do 10...								Blowing a gale; could not lift.
do 11...								Terrific gale blowing. Highest sea for six years here; could not lift.
do 12...	2	102	279	37	4	17	600,000	Weather moderate.
do 13...								Fish in nets not ripe.
do 14...	2	27	43	21	3	41	130,000	Lifted nets, but fish not ripe. Look as if they would not spawn for a week. Snowing all day.
do 15...								Sunday.
do 16...								Snowing; did not lift; fish not ripe. Strong wind and high sea running.
do 17...	2	123	209	41	7	73	700,000	Fish spawning more freely; snowing, cold; not nearly so many fish in nets as same date last year.
do 18...								Fish left in nets not ripe; snowing most of the day.
do 19...								Strong wind and heavy sea from west; could not get down to nets.

STATEMENT showing the daily operations, &c., at Wiarton—*Concluded.*

Date of lifting Nets.	No. of Nets lifted.	No. of Fish from which Spawn was collected and liberated.		No. of Fish Spawned out before entering Nets and liberated.	No. of Fish found injured or dead in Nets.		No. of Eggs collected.	General Remarks.
		Males.	Females.		Whitefish.	Salmon Trout.		
Nov. 20...	2	98	142	37	3	29	440,000	Warm and thawing. Few, if any, fish have entered nets since last lifted.
do 21...								Raining fast and blowing a gale all day ; could not lift nets.
do 22...	2	112	103	41	7	37	380,000	Weather warm ; water perfectly calm ; few, if any, fish entered nets since last date.
do 23...								Raining very heavily all day and night ; blowing a gale of wind.
do 24...	2	29	40	19	3	21	160,000	Snowing all day ; country flooded with water ; trains stopped, &c.
do 25...								Snowing and blowing a gale all day.
do 26...								Started down bay to lift nets but had to return ; too rough.
do 27...	2	48	103	28	6	37	450,000	Snowing and freezing. Very painful and disagreeable taking eggs. Took 1 net out.
do 28...								Cold, rough and freezing ; snow falling all day.
do 29...	1	27	49	20	3	21	150,000	Freezing very hard, and snowing. Run of fish over ; will take out No. 2 net to-morrow.
do 30...								
.....		945	1,746	325	60	334	5,545,000	

Did not get No. 2 taken up until 4th Dec., owing to rough and windy weather.

C. WILMOT.

## 12.—SANDWICH HATCHERY.

## PROVINCE OF ONTARIO.

## REPORT OF THE OFFICER IN CHARGE OF THE SANDWICH HATCHERY, 1891.

SIR,—The operations of the Sandwich fish-breeding establishment are hereby submitted in this my annual report for the past year.

The last report showed that there were 90,000,000 eggs of the whitefish put in the hatchery, and this report will show how these were hatched and disposed of. From this total number of eggs there were hatched out and distributed in the several different places mentioned below 76,000,000 young fish. The young fish were planted in the different places, as stated, in a good, healthy condition.

Newcastle (eyed eggs).....	2,500,000
Bedford, N.S. do .....	2,500,000
Magog, Que. do .....	2,500,000
St. John's, N.B. do .....	2,500,000
Ottawa do .....	6,000,000
Meaford, Georgian Bay.....	1,000,000
Warton do .....	1,000,000
Kincardine, Lake Huron .....	1,000,000
River St. Clair, Port Lambton.....	1,000,000



Lake St. Clair, Mitchell's Bay.....	3,000,000
do Peach Island.....	2,000,000
Belle Isle, Detroit River.....	2,000,000
Fighting Island do .....	6,000,000
In Bay off Fighting Island, Detroit River.....	3,000,000
Stony Island, Detroit River.....	2,000,000
Bois Blanc Island do .....	4,000,000
Pigeon Bay, Lake Erie.....	2,000,000
In Lake below Bois Blanc Island.....	4,000,000
Bar Point, Lake Erie.....	2,000,000
Colchester do .....	2,000,000
Kingsville do .....	1,000,000
Leamington do .....	1,000,000
Port Stanley do .....	1,000,000
Hamilton, Lake Ontario .....	1,000,000
Niagara do .....	1,000,000
Toronto do .....	1,000,000
In river at hatchery.....	15,000,000
Making the total.....	<u>76,000,000</u>

### *Collecting Pickerel Eggs.*

Full preparations were made in the hatchery for receiving the pickerel eggs, after having fully cleared the house of everything connected with the work of hatching the whitefish crop.

The following shows the total number of eggs procured, and the names of the places where collected:—

Wees Bros., Lake Huron.....	4,000,000
Joseph Leazeau do .....	5,000,000
Hitchcock & Steed, Point Edward.....	10,000,000
Total.....	<u>19,000,000</u>

It must be here stated that even with this reduced number of eggs this year much credit must be given to the fishermen, who did all in their power to assist in the work, especially Steed & Hitchcock, who held all their fish back, to enable us to secure all the eggs possible to be got. From these eggs there were hatched out 15,000,000 young pickerel, and distributed as follows:—

Point Edward, Lake Huron.....	2,000,000
Port Lambton, River St. Clair... ..	1,000,000
Mitchell's Bay, Lake St. Clair.....	2,000,000
Peach Island do .....	1,000,000
Fighting Island, Detroit River.....	2,000,000
Bois Blanc Island do .....	1,000,000
Pigeon Bay, Lake Erie.....	1,000,000
In lake, outside of Bois Blanc.....	2,000,000
In river, at hatchery .....	3,000,000
Total .....	<u>15,000,000</u>

### *Collecting Whitefish Eggs.*

Last year I was enabled to show the largest number of eggs collected in any one year since the institution was started, but this year I must fall back from last

year's figures; the wind and weather was so much against the collecting of eggs that we were debarred from getting full supplies. The following shows the number of eggs collected :—

Bois Blanc Island .....	20,000,000
Fighting do .....	55,000,000
Total.....	<u>75,000,000</u>

#### *The Catch of Whitefish.*

The catch of whitefish has not been nearly as large this year as last, mainly on account of the storms and low water caused by the winds holding the water back from the shores. At Bois Blanc Island fishery there were days at times when the water was held back from the shore from 200 to 290 feet—when the fishermen during such a time are unable to do anything. At Fighting Island the winds were so strong that the fishermen were unable to pull their boats against the storm, thus throwing them back in their usual catch of fish. The storm was so great that upwards of 100 fish which had been penned up were allowed to escape, which meant a loss of fully a million of eggs.

#### *The Pickerel Catch.*

The “close season” being well observed in the catch of pickerel and the lateness in which our operations were begun gives us a smaller showing than usual in the number of eggs laid down. The fishermen say that the catch was very good. The pound-net authorized to be set by the department was this year a failure as regarding eggs, on account of the lateness of the season when it was set; but if set again immediately on the breaking up of the ice close to the Thames River good success may be expected next year. The plan will be to send men early in the spring at the breaking up of the ice, when no doubt large quantities of eggs can be got at that place.

#### *Improvements.*

The only improvement required worth speaking of around the hatchery is the taking up of the old waste-water pipe and replacing by a new one, which will have to be done this summer, and will cost in the neighbourhood of \$50.

Improvements at Bois Blanc Island are absolutely necessary on account of the changeableness of the waters at times; and there is no telling at what moment the storms will produce this change. There is a place on the east side of the island, an old dock which can be secured very reasonably, and is the best and cheapest thing that can be done to secure the parent fish safely. Something like this must be done to ensure us against loss of both fish and eggs during storms or low water. The building of a new boat to convey fish from the west to the east side of the island is also necessary. The building of the boat and fixing up the grounds to receive the racks at the place mentioned all told will cost \$300. It is essentially necessary that more fishing grounds be secured, that we may be enabled to fill the house with eggs with certainty. It is unwise to be left without full supplies of eggs when more grounds can be secured. Yet for all of our shortage this year we are much better off with the four stations that were fished than the Americans are, who had seven grounds and secured less eggs than we did. Now that the department has secured the grounds on Fighting Island, I would strongly advise that they be fished by the Government with its own employes' fishing gears. All machinery and everything in the house are working admirably and at present no further improvement on them is required.

All of which is respectfully submitted.

Your obedient servant,

WM. PARKER.

## 13.—OTTAWA HATCHERY.

## PROVINCE OF ONTARIO.

## REPORT OF THE OFFICER IN CHARGE OF THE OTTAWA HATCHERY, 1891.

The report of the officer in charge of the Ottawa hatchery for 1891 is herewith submitted, being the second annual report of the working of this hatchery. The ova received from the different hatcheries were as follows:—

Salmon trout ova from Newcastle hatchery, Ontario..	1,500,000
Speckled trout ova from do ..	100,000
Whitefish ova from Sandwich hatchery, Ontario. ....	6,000,000

The young fry were distributed from this hatchery last spring in excellent condition. They were planted in waters at the following places:—

*Salmon Trout Fry.*

Mr. Kerkwood, Lavant station. ....	50,000
Brading Lake, Que.....	12,000
Rideau Lake, Portland, Ont.....	180,000
Beloer's Lake, Que.....	50,000
Mr. Dunlop, Pembroke, Ont.....	24,000
Meache's Lake, Que.....	65,000
Charleston Lake, Ont.....	140,000
Charbot Lake, Ont.....	120,000
Rideau Lake, Ont.....	85,000
Charleston Lake, Ont.....	85,000
Bass Lake, Ont.....	45,000
Little Lake, Ont.....	45,000
Duchesne Lake, Aylmer, Que.....	200,000
Meache's Lake, Que.....	35,000
Moseau Lake, Que.....	35,000
DesChesne Lake, Que.....	85,000
Fort Coulonge trout lake, Que.....	50,000
Shawville Lake, Que.....	24,000
Chilcott's Lake, Que.. ..	50,000
Total.....	1,380,000

*Speckled Trout Fry.*

John Graham's lakes, Que.....	15,000
Bernard Lake, Que.....	25,000
Brading & Co.'s lake, Que.....	8,000
Charles Magee's lake, Que.....	5,000
Home and trout lake, Que.....	20,000
Pembroke Lake, Ont.....	10,000
Total.....	83,000

*Whitefish Fry.*

Meache's Lake, Que.....	420,000
Consecon Lake, Ont.....	1,000,000
Meache's Lake, Que.....	420,000
Mississippi Lake, Ont.....	420,000
Sudbury Lake, Ont.....	280,000
Belleville, Bay Quinté, Ont.....	1,000,000
Consecon Lake, Ont.....	1,200,000
DesChesne Lake, Ont.....	840,000
Total.....	5,580,000



*Remarks.*

It would be advisable to plant most of the whitefish fry in the following places in the future, namely:—Consecon, Bay of Quinté, DesChesne and Meache's lakes. With the exception of DesChesne and Meache's lakes, the people in this section do not seem to call for the whitefish, as they are not a sporting fish, and as they are not allowed to fish in the nets.

*Salmon Trout Fry.*

The greater part of these should be put in the following lakes:—Rideau, Charleston, Sharbot, DesChesne and Meache's. These waters are well adapted for salmon trout, and they are also convenient to reach for planting them in.

*Speckled Trout Fry.*

One hundred thousand of these trout fry can be readily disposed of to applicants in and around Ottawa at present, and the demand will increase.

Last year, at Trout Lake, some speckled trout were caught, which were supplied from this hatchery three years ago. Greater results will appear in the course of a year or two more. During the coming spring more information will be got from parties connected with the lakes where the young fish have been planted.

The hatchery will require painting after the coming season's work is over. Twenty-four cans or fish-carriers require repairs and painting also. Arrangements should be made for an ice-box to contain ice, with coils of piping underneath the stairway. This would lower the temperature of the water during two months in summer. During last season the water rose to a temperature of 75°, which caused a great many of the three-year-old trout to die in July and August.

The number of visitors the past year, from 1st January to 31st December, was twenty-five thousand five hundred and fifty-three. There were almost as many more that could not register their names in the book, when large excursion parties come to the city, and also during exhibition time. It would not be out of the way to say fifty thousand people visited the hatchery during the year.

I have the honour to be, Sir,

Your obedient servant,

PHILIP VEALE,

*Fishery Officer in Charge of Hatchery.*

#### 14.—BAY VIEW LOBSTER HATCHERY.

##### PROVINCE OF NOVA SCOTIA.

##### REPORT OF THE OFFICER IN CHARGE OF THE BAY VIEW LOBSTER HATCHERY, 1891.

SIR,—I have the honour to submit my report of the operations at Bay View lobster hatchery during the past season.

On the 1st of July last I arrived at the hatchery, which was then in charge of the Dominion Superintendent of Fish Culture, who remained until everything was in fair working order.

In consequence of some delay in getting the apparatus into the building, operations did not commence until the last of June, when a few eggs were obtained and placed in the incubators. About 5,000,000 eggs were obtained from the factory of Messrs. Burnham & Morril, Bay View, and some 4,000,000 more from Messrs. Hamblin & Co., Cariboo; Hogg, Craig & Co., and McClure, Pictou Island. The proprietors and managers of these factories were very courteous and rendered every assistance in procuring eggs at these establishments. Out of 9,000,000 eggs received, about 7,000,000 young lobsters were successfully hatched, and after they were six days old they were planted near to the same grounds from which the mother lobsters were taken.

Much difficulty was experienced in obtaining eggs in good condition; the weather being hot, and not having an experienced staff of men at the different factories to collect them, many were found to be dead upon reaching the hatchery. This difficulty may be overcome in the future by having a reliable man stationed at each factory, whose duty it will be to take charge of and look after the lobsters when they are landed. A small steamer is required to visit the different factories, collect eggs, and distribute the fry when hatched.

Some of the eggs remained in the jars from seven to fourteen days before hatching, but some of those collected in a more mature state hatched within twenty-four hours.

When the young lobster bursts the shell it rises to the surface of the water and swims about from six to eight days; it then sinks to the bottom and seeks shelter under the rocks.

Lobsters hatched artificially and kept until they are six or eight days old before being liberated are less liable to perish than those hatched naturally, as the latter are at the mercy of the tides and storms, which may drive them to unsuitable and unnatural grounds, and on the shores, before they sink to the bottom, and during the time they are on the surface they are easy prey to other fishes; but those hatched artificially escape all such dangers until they are capable of protecting themselves, and no good reason can be given why nearly all of them restored to their natural element in this way should not come to maturity, as if naturally bred.

During the past fishing season there were 600,000 one-pound cans, equal to 3,500,000 lobsters, packed at the seven factories within a radius of sixteen miles of the hatchery, and as 7,000,000 young lobsters were restored to the same grounds, this certainly ought to give some assistance for upholding the fishery in this locality.

On the 15th July some of the factories closed and the fishermen brought in no female lobsters; consequently I was compelled to close the hatchery on the 17th, after being in operation but 18 days.

By commencing operations in the early part of the season 150,000,000 lobsters might be easily turned out, as the capacity of the hatchery is equal to that amount.

From the 17th July until the 19th of September my time was fully occupied in cleaning up the apparatus and fixtures, and putting things into order for the winter, building coal shed, closet, roofing water tank, taking up suction and water pipes, painting troughs, steam pump and piping, putting banisters around stairs, etc.

Some alterations and improvements in the feed troughs and salt water suction pipes are necessary.

To guard against damage by ice during the approaching winter it will be necessary to have piles driven around the outer end of the wharf and have stone placed over the mud sills and around the piles inside the channel.

The fresh water supply was insufficient for the boiler. It was found necessary to build a tank, 12 feet square by 8 feet deep, which when filled from the roof will meet all requirements.

About two thousand people from different parts of Canada, Great Britain and the United States visited the hatchery during the time it was in operation, and were delighted at seeing millions of young lobsters swimming about in the tanks.

I have the honour to be, Sir,

Your obedient servant,

ALFRED OGDEN,

*Officer in Charge.*



REPORT OF MR. PARKER, TEMPORARY ASSISTANT IN CHARGE OF  
THE BAY VIEW LOBSTER HATCHERY, 1891.

SAM. WILMOT, Esq.,  
Supt. of Fish Culture for Canada,  
Ottawa.

SIR,—Having been directed by the department to go to Pictou at your request, to render service in opening up the lobster hatchery at Bay View, Nova Scotia, I beg to report upon that part of the work you directed me to perform, namely, collecting and laying down the eggs, caring for them, and hatching lobster fry.

Whilst I have for many years been engaged collecting and laying down the eggs of the whitefish at Sandwich, and of salmon trout at the Newcastle hatchery, under your supervision, the work connected with lobster breeding was wholly new to me, but as your object in calling me to Pictou was on account of my long and practical knowledge of the working of your patent automatic glass incubators, which have proved to be so successful in the breeding of whitefish and pickerel, and as the same jar in a modified form was to be used in hatching the lobster eggs, you relied upon me largely to give the benefit of my knowledge and experience in the application of this jar, and successfully prove its adaptation to the hatching of lobsters.

I left Sandwich, Ontario, on the 22nd of June, and reached Pictou on the 25th, and on that day reported myself to you at the Bay View hatchery for work. As you were present at the time fitting up the establishment, it will not be necessary for me to make any statements in particular regarding the building and machinery which you had set up, other than to state that the building was a more extensive one than I had expected to find, and that the arrangements of machinery and jars were very complete.

It was a novelty to me with all matters relating to the gathering and laying down of the lobster eggs, as they are procured in quite a different way from those of the whitefish and other fish I have been working with, but I soon comprehended the matter.

My first experience was in company with yourself in collecting some eggs from lobsters brought in to the Bay View factory, which is close alongside the hatchery. These were placed in the jars in an evidently safe condition.

My next experience was when joining you and some of your employés in going to Pictou Island in the tug "Shannon," where at Mr. Hogg's factory quite a large number of eggs were successfully gathered. A good deal of care was taken to obtain those eggs from the parent fish. These were taken to the hatchery, and carefully put in the incubators. As you relied upon me for the direct care and work connected with hatching these eggs, as well as all others laid down afterwards, I beg to give you my report in relation to them, as well as my views in general upon the practicability of rearing lobsters by artificial means.

The lobster eggs require more special care and attention than any other eggs I have ever handled. They require most careful manipulation when taken from the body of the parent lobster; they require a great deal of management in the separating of the eggs, both in their washing and cleansing from all filth that may be attached to them, and from the large amount of stringy, fibrous matter which clings to the eggs when taken. I found the closest attention must be given to this, else success in hatching the eggs cannot be attained. The operation of hatching in the jars is not unlike that with the pickerel and whitefish eggs, but the lobster eggs being much smaller and lighter, greater care is required in the management of them, to prevent their being carried out of the jars by the upward flow of the water. But, as you had anticipated this difficulty by fitting up apparatus to save these eggs, the difficulty was not so great as might have been expected. Some further improvements in this line will no doubt be instituted by you during another season.



The first eggs got at the Bay View factory and at Pictou Island turned out a very fair percentage of fry, and as nearly as I could calculate some *three millions* of this fry were collected in the several tanks. Many of these fry were planted in the bay outside (before your departure for Ottawa) in the most healthy condition. A large quantity of eggs were gathered by the factory men, also by fishermen, and were brought in by the steam tug daily while you were there. These did not prove to be satisfactory. The want of careful handling, and the keeping of the eggs all night in large pails was, no doubt, the means of injuring and over-heating them to such an extent as to cause the loss of almost the whole of this lot of ova after you left.

Some other eggs were got at the Bay View factory, which, being near at hand, where my personal attention could be given to collecting and caring for them, turned out very fairly; so much so that I may report up to the time I left the hatchery, on the 17th instant, some three millions more of fry were hatched, making a total of upwards of six millions of lobster fry produced up to my time of leaving. There were also a considerable number of eggs left in the jars under the special care of officer Ogden. His particular attention to them would, no doubt, add to the numbers of young lobsters already put out of the Bay View hatchery for this season.

Upon the whole, I may safely report that the hatching of lobsters by the artificial means, and by the system you have introduced, may be considered easy of accomplishment; but the idea must not prevail that this can be done without the most special care and attention being faithfully given to the work. Very long experience in artificial fish culture leads me to conclude that much more attention is requisite to ensure success in lobster hatching than with other fish.

With the improvements which you proposed to make in the establishment for another season, I cannot see anything in the way of making the Bay View hatchery a success in the work for which it has been built. The building is a good one; the boiler and pump work well, although great trouble and anxiety was at first experienced by putting things in order; but with the experience now had, and with the carrying out of the proposed improvements, there should be no reason to doubt the possibility of turning out many hundreds of millions of young lobsters from the Bay View hatchery in future seasons.

I have the honour to be, Sir,

Your obedient servant,

WM. PARKER,

*Officer in Charge Sandwich Hatchery, Ontario.*



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REPORT

OF THE

POSTMASTER GENERAL

FOR THE

YEAR ENDED 30th JUNE,

1891.

*PRINTED BY ORDER OF PARLIAMENT.*



OTTAWA:  
PRINTED BY S. E. DAWSON, PRINTER TO THE QUEEN'S MOST  
EXCELLENT MAJESTY.

1892.

[No. 12—1891.] *Price 20 Cents.*





*To His Excellency the Right Honourable SIR FREDERICK ARTHUR STANLEY, BARON STANLEY OF PRESTON, in the County of Lancaster, in the Peerage of Great Britain, Knight Grand Cross of The Most Honourable Order of the Bath, Governor General of Canada, and Vice Admiral of the same, &c.*

MY LORD,—

I have the honour to forward to Your Excellency the accompanying Report of the Post Office Department of the Dominion of Canada for 1891, which is respectfully submitted.

I have the honour to be,

My Lord,

Your Excellency's most obedient servant,

ADOLPHE P. CARON,

*Postmaster General.*

POST OFFICE DEPARTMENT,

OTTAWA, 29th March, 1892.





## SCHEDULE.

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POST OFFICE DEPARTMENT,

OTTAWA, 7th March, 1892.

To the Honourable SIR A. P. CARON, K.C.M.G.,  
Postmaster General.

SIR,—I have the honour to present to you the usual annual statements showing the business of the Canadian Post Office during the year ended 30th June, 1891 ; the number of Post Offices in the Dominion at that date was 8,061, being an increase of 148 over the number in operation on the 1st July, 1890.

The mail routes have been augmented by 767 miles ; and the annual mail travel has been increased from 26,498,497 miles to 27,152,543 miles. The North-West Territories and Manitoba show the largest increase in mail routes ; the number of miles of mail route in those Provinces having increased from 6,653 to 7,480. British Columbia also shows a considerable increase ; the mileage in 1890 being 5,668, and in 1891, 5,991.





## RAILWAY MAIL SERVICE.

Since the Return of last year to October, 1890, Mail Service has been put on 309 miles of additional railway lines, as follows :—

Name of Railway.	Places between which new Railways have been used for Mail purposes since October, 1890.	Miles.
Columbia and Kootenay.....	Nelson and Sproat.....	28
Manitoba and North-Western.....	Extension from Saltcoats to Yorkton.....	17½
Canadian Pacific.....	Prince Albert and Regina.....	247
Montreal and Ottawa.....	Vandreuil Junction and Rigaud.....	16½
		309

It was stated, in the Annual Report for 1890, that mails had been carried, during that year, over 11,849 miles of railway, this, on revision, has been reduced to 11,812 miles. This year the mileage is 12,121, showing an increase of 309 miles.

STATEMENT of Distance travelled daily with Mails, on each Railway in Canada, in June, 1891.

Name of Railway.	Actual length of Railway in Miles.	Daily Service by Travelling Post Office.		Daily Service by Bags in charge of Company's Servants.
		Number of Postal Cars on Road.	Distance Travelled in Miles.	
Alberta.....	109			218
Bay of Quinté.....	4			34 <sup>3</sup> / <sub>8</sub>
Boston and Maine.....	33 75	1	76	70
Canada Atlantic.....	131 7	1	158	422
Canada Eastern.....	117			234
Canadian Pacific.....	5,588 5	51	10,682 <sup>1</sup> / <sub>2</sub>	4,200 <sup>23 37</sup> / <sub>100 100</sub>
Caraquet.....	65			103 <sup>3</sup> / <sub>4</sub>
Central Ontario.....	104	2	208	30
Central Vermont.....	65	2	190	374 <sup>1</sup> / <sub>2</sub>
Columbia and Kootenay.....	28			39 <sup>1</sup> / <sub>4</sub>
Cumberland.....	32			74
Elgin, Petittcodiac and Havelock.....	27			54
Erie and Huron.....	67	2	134	72
Esquimalt and Nanaimo.....	78	2	156	
Grand Trunk.....	2,916 11	60	8,125 <sup>3 11 10</sup> / <sub>100 100 100</sub>	7,033 <sup>1</sup> / <sub>2</sub>
Great Eastern.....	42			90
Intercolonial.....	919	16	3,881 <sup>1</sup> / <sub>2</sub>	1,087 <sup>1</sup> / <sub>3</sub>
Joggins.....	8			16
Kent Northern.....	27			54
Kingston, Napanee and Western.....	56	2	182	30
Kingston and Pembroke.....	104	2	208	108
Lake Erie and Detroit River.....	38	2	76	
L'Assomption.....	3 5			14
Maine Central.....	6 7			106
Manitoba and North-Western.....	234 2	1	205 <sup>1</sup> / <sub>2</sub>	62 <sup>2</sup> / <sub>8</sub>
Michigan Central (Canada Southern).....	355 8	6	630 <sup>1</sup> / <sub>2</sub>	412
Montreal and Ottawa.....	16 <sup>1</sup> / <sub>2</sub>			34
New Brunswick and Prince Edward Island.....	36			72
Pontiac and Pacific Junction.....	59 3	1	118	
Prince Edward Island.....	207 8	3	234 2	459
Quebec and Lake St. John.....	185 2	2	380	
Quebec Central.....	138	2	286	
St. John Bridge.....	1 5	2	10 6	8
Salisbury and Harvey.....	48	1	96	
Short Line.....	82			165
Thousand Islands.....	3 5			30 <sup>1</sup> / <sub>2</sub>
Western Counties.....	67	2	134	
Windsor and Annapolis.....	116	2	402	
	12,121 06	165	26,573 <sup>2 8 4</sup> / <sub>100 100 100</sub>	15,706 <sup>2 8 4</sup> / <sub>100 100 100</sub>



## COMPARATIVE Statement of Railway Mail Service in June, 1891, and September, 1890.

Date.	Miles of Railway in Operation on which Mails are Carried.	Daily Service by Postal Cars.		Daily Service by Bags in charge of Company's Servants.	Total Distance Travelled.	
		No of Postal Cars on Railways.	Distance Travelled. Miles.		Daily.	Yearly.
In June, 1891.....	12,121	165	26,573	15,706	42,280	13,233,878
In September, 1890.....	11,812	125	24,410	15,711	40,122	12,558,326
Increase.....	309	40	2,163	5 (Decrease.)	2,158	675,552

The circumstance most worthy of note in connection with the mail service of the Dominion during the past year, is the very considerable extension of the railway mail service in Nova Scotia. During that period no less than four new railways have been placed at the disposal of the Department, and have been utilized for mail purposes. The Oxford and New Glasgow, the Nova Scotia Central, the Annapolis and Digby and the Cape Breton Railways; and the Postmaster-General has thus been enabled to put the mail service in the districts traversed, which with the means previously at the disposal of the Department could not fail to leave much to be desired, on the most favourable footing possible. The Oxford and New Glasgow Railway runs between the Intercolonial Railway and the north shore of the province, and furnishes a most satisfactory exchange of mails to the line of settlements on the Straits of Northumberland. By means of the Nova Scotia Central Railway, the towns of Lunenburg and Bridgewater, which have hitherto been twelve hours drive by coach from railway connections either at Halifax or at the towns on the Windsor and Annapolis Railway, are now brought into direct connection with the railway mail service of the Dominion. A similarly gratifying improvement has been effected in the service on Cape Breton Island by the use of the Cape Breton Railway, and the extension thereby to Sydney and other important places on the east coast, and on the north of the Bras d'Or Lakes, of the most efficient of modern agencies for the transmission of correspondence. The line between Digby and Annapolis, known not inappropriately as the Missing Link, completes the connection by railway between Digby and Yarmouth and other places at the western end of the Peninsula and Halifax. The completion of this railway does away with the necessity for the steam service by which this connection has hitherto been maintained.

In Manitoba, by taking advantage of the Northern Pacific Railway which runs from Winnipeg southward to the United States boundary, and from Morris, about half-way down that line, to Brandon on the Canadian Pacific Railway; and of the section of the Canadian Pacific Railway now under construction between Brandon and the coal fields in the south-west, the Department has been able to improve very considerably the character of the service in the central and southern portions of the province. The South-West Colonization Branch of the Canadian Pacific Railway has been extended from Glenboro to Nesbitt, a distance of 27 miles, and there has been a corresponding extension in the railway mail service on that line.

In the North-West Territories the only new railway of which the Department has made use during the past year is that between Calgary and Edmonton. This route is deserving

of special mention on another account. By means of it mails are at last carried by railway to the western terminus of the great stage route which, starting at Winnipeg, ran far north of the line of the present Canadian Pacific Railway and terminated at Edmonton, taking in its course Prince Albert, Carleton, Fort Saskatchewan and Fort Pitt. As it was originally established the route was 900 miles long, but the building of the Canadian Pacific Railway westward furnished opportunities for bringing these settlements nearer to railway connection, and Portage la Prairie, Brandon and Qu'Appelle were successively the points for departure. As the railway continued its course towards the west the stage route was broken into three divisions, Prince Albert and the neighbouring district retaining their connection with Qu'Appelle; Fort Saskatchewan and Fort Pitt being served from Swift Current; and Edmonton receiving its mails from Calgary. The completion of the Prince Albert and Regina Railway did away with the necessity for the two former services, and now Edmonton has its own direct connection with the main line of the Canadian Pacific Railway at Calgary. But no sooner are the older settlements provided with the best modes of service than new routes are established towards the north, a stage service having already been organized between Prince Albert and Cumberland House, 230 miles to the north-east.

In British Columbia several short railways have been utilized during the past year. The Kootenay Lake district now has its railway, and during the season of navigation mails are carried between Nelson, the principal post office in the district, and the river landing, where the exchange is made with the steamers running on the Columbia River between Revelstoke, a station on the Canadian Pacific Railway, and the United States boundary line. The Mission Branch of the Canadian Pacific Railway carries the mails due south to the frontier, where a branch of the Northern Pacific Railway is tapped and direct connection with Tacoma secured. The Shuswap Railway is the last to be laid under contribution by the Department. Like the former it runs south from the Canadian Pacific Railway but into the Okanagan District.

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#### ATLANTIC OCEAN MAIL SERVICE.

The contract with the Montreal Ocean Steamship Company, represented by the Messrs. Allan, expired on the 11th April, 1891, and no satisfactory arrangement having been made for its continuance, the direct mail service to the United Kingdom was discontinued and all Canadian mails for Europe were transmitted *viâ* New York.

On the 21st May the direct service was partially resumed and an agreement was made with the Messrs. Allan for the conveyance of mails to Liverpool by the "Parisian" and "Sardinian" at the same rate of compensation as that received by the New York mail steamships, namely fifty cents a pound for letters and five cents a pound for newspapers, books, &c. On and after the 13th September other steamers of the Allan and Dominion Lines were employed in the conveyance of the European mails. When the navigation of the St. Lawrence closed, the mails were forwarded, under the same conditions (from 26th November to 22nd December) by the Allan and Dominion Lines from Portland, Me.

On the 24th December a contract was made with the Messrs. Allan for the resumption of the direct service between Canada and Great Britain, and from that date the mails have been forwarded *viâ* Halifax as in former years.



## PACIFIC OCEAN MAIL SERVICE.

The following table will show the extent to which the mail service between Canada and China and Japan was availed of for the transmission of correspondence between those countries and the Dominion.

AMOUNT of Mail Matter passing between Vancouver and the following Post Offices in China and Japan, from 17th January, 1891, to 26th January, 1892, inclusive.

Offices.	Letters.	Weight.		Papers.	Weight.		Mis- cellaneous.	Weight.	
		Lbs.	oz.		Lbs.	oz.		Lbs.	oz.
Hong Kong .....	17,154	674	13	4,017	946	04	2,912	1,019	12
Shanghai .....	6,295	311	07	1,444	452	08	800	295	12
Yokohama .....	37,926	1,197	09	14,651	3,143	09	10,552	2,979	06
Total .....	61,375	2,183	13	20,112	4,542	05	14,264	4,294	14

674 bags of closed mails for and from Europe were also conveyed by the Canadian Pacific steamships during the period covered by the above return.

By the arrival at Vancouver on the 28th April, 1891, of the magnificent steamship the *Empress of India* with mails from Hong Kong and Yokohama, the mail service to China and Japan for which the Canadian Pacific Railway Company had entered into contract with the Imperial Post Office, was fairly inaugurated.

The vessels employed in this mail service are the *Empress of India*, the *Empress of Japan* and the *Empress of China*. These three steamships were built at Barrow, in England, were completed early in 1891, and are alike in every particular. Their length is 485 feet, breadth 51 feet, depth 36 feet, gross tonnage, 5,700 tons; horse power, 10,000. During their trial trips a speed of over 19 knots per hour was developed. These steamships are lighted by electricity and ventilated by a series of electric fans.

The officers in command are all members of the Royal Naval Reserve.

The route taken by this line between Vancouver and China and Japan is 300 miles shorter than any other route from the American continent; and as the contract for the conveyance of the mails stipulates for a high rate of speed, the time hitherto taken to reach China and Japan has been materially lessened.

## WEST INDIA MAIL SERVICE.

In January, 1890, there was inaugurated a direct mail service between St. John, N.B., and Demerara and certain of the West India islands, by steamers subsidized by the Canadian Government. Whilst this service has so far been somewhat infrequent and irregular, as compared with that *viâ* New York, a considerable amount of correspondence has been forwarded on each trip. It is expected that with the increase of trade, which the establishment of this line of steamers will no doubt speedily develop, a more frequent service will soon be secured; and in that case the bulk of the increasing correspondence with the West Indies will no doubt be exchanged directly, instead of by way of the United States.

The direct parcel post exchange with these islands, which the opening of this new line has made possible, has already been availed of to a considerable extent, and will undoubtedly be more so, as the frequency and regularity of the service are increased.



FREE DELIVERY BY LETTER CARRIERS.

There has been an increase in all classes of matter delivered by carriers throughout the Dominion. The City or Drop Letters, on which the postage was doubled a few years since, have now reached a point in excess of the number delivered previous to the increase. The following are the figures :—

1888.....	211,156	City Letters and Post Cards.
1889.....	194,346	do do
1890.....	210,779	do do
1891.....	216,966	do do

ESTIMATE of the Weekly Averages of Letters, Post Cards and Newspapers delivered by Letter Carriers under the Free Delivery System taken in October, 1891.

Office.	City Post Cards.	Other Post Cards.	City Letters.	Registered Letters.	Other Letters.	Total Letters and Post Cards.	Newspapers.	Total Letters, Newspapers and Post Cards.	No. of Carriers.	
									Actual Delivery.	Including Superintendents and Sorters
Halifax .....	1,362	743	5,617	185	13,399	21,306	9,795	31,101	16	17
Hamilton .....	5,228	4,745	8,729	682	22,136	41,520	16,033	57,553	35	37
Kingston .....	1,342	2,899	3,910	466	10,398	19,015	8,825	27,840	9	9
London .....	2,167	4,071	4,777	755	19,455	31,225	11,900	43,125	17	21
Montreal, including Hochelaga, Point St. Charles, St. Jean Baptiste and St. Gabriel..	8,479	6,900	37,448	2,538	59,820	115,185	43,237	158,422	68	79
Ottawa .....	1,779	3,108	6,284	729	18,482	30,382	21,320	51,702	37	39
Quebec and St. Sauveur.	3,487	3,384	5,963	895	18,373	32,102	11,763	43,865	19	20
St. John.....	1,654	2,093	2,925	173	14,587	21,432	12,364	33,796	18	20
Toronto.....	21,442	20,292	85,312	6,391	156,600	290,037	67,805	357,842	98	112
Victoria .....	552	266	1,592	52	4,435	6,897	5,924	12,821	7	8
Winnipeg.....	1,466	1,239	5,451	316	14,700	23,172	16,653	39,825	16	17
Totals.. .....	48,958	49,740	168,008	13,182	352,385	632,273	225,619	857,892	340	379
Totals in 1890.....	45,964	45,256	164,815	12,833	340,945	609,793	217,176	827,019	327	367
	2,994	4,484	3,193	349	11,440	22,480	8,443	30,873	13	12

Upon the above Averages the Total Annual Delivery would be :—

	Letters and Post Cards.	Newspapers.	Total Letters, Post Cards and Newspapers.
In 1891 .....	32,878,196	11,732,188	44,610,384
In 1890 .....	31,709,236	11,293,152	43,002,388
Increase in 1891 .....	1,168,960	439,036	1,607,996

## REGISTERED LETTERS.

The number of registered letters passing by mail within the Dominion during the year ended 30th June, 1891, is estimated at 3,292,000, a slight increase over the number in 1890.

The following statement shows the number of registered letters estimated to have passed by mail in Canada each year since 1882:—

In 1883.....	2,659,000
1884.....	3,000,000
1885.....	3,000,000
1886.....	3,400,000
1887.....	3,560,000
1888.....	3,580,000
1889.....	3,649,000
1890.....	3,280,000
1891.....	3,292,000

There were during the year ended 30th June, 1891, 155 cases of abstraction of contents, or portions of contents, or loss of registered letters containing money, sent through the Canadian post office. This is an increase of only six over last year, and is a strong proof of the efficacy of the special measures taken in 1889 to increase the safety of registered correspondence whilst in transit by mail.

Of these 155 cases, the contents, or a portion thereof, were recovered from the officers responsible, or otherwise made good, in 42 instances, where the loss took place whilst in custody of the post office. In 33 cases no evidence could be obtained to account for the alleged discrepancy. In 27 cases the loss was made good by the officers responsible. The contents, or portions thereof, were recovered or made good in 24 cases where the letters were stolen or supposed to have been stolen from post offices, or from mails *en route*; and there were 13 cases of a similar character in which the contents were not recovered.

The enquiries instituted by the department in respect to alleged losses by mail would be much facilitated, if persons receiving registered letters would be careful not to destroy the envelopes before they have fully verified the accuracy of the alleged contents.

In many cases of reported loss all enquiry by the officers of the department has been rendered abortive, because the addressees had destroyed the envelopes before ascertaining that the contents were correct.

## POSTAGE STAMPS.

Complaints of defective mucilage would be far less frequent if the public would kindly bear in mind that it is the *envelope* of a letter, or the *cover* of a packet, and *not the postage stamp*, which should be moistened when stamps are affixed in prepayment of postage. When a stamp is passed over the tongue, the mucilage is frequently almost wholly removed.

## STATEMENT of Receipts and Issue of Postage Stamps, Post Bands, Post

RECE

	<sup>3</sup> / <sub>4</sub> cent Stamps.	1 cent Stamps.	<sup>2</sup> / <sub>3</sub> cent Stamps.	3 cent Stamps.	5 cent Stamps.	6 cent Stamps.	10 cent Stamps.
Stamps on hand from last year . . .	91,500	6,880,800	3,560,600	19,916,100	1,620,450	187,450	99,950
Received from manufacturers. . . . .	525,000	36,300,000	7,450,000	53,500,000	1,500,000	450,000	150,000
Originally issued to non-accounting Postmasters on credit and subsequently charged for collection . . . . .		68,800	12,200	108,700	6,400	1,450	.....
Returned by Postmasters unfit for use . . . . .	510	16,091	7,206	31,482	928	145	322
Returned by Postmasters fit for use . . . . .	1,000	105,300	29,200	157,900	8,750	3,900	50
	618,010	43,370,991	11,059,206	73,714,182	3,136,528	642,945	250,322

ISS

Issued to accounting Postmasters during the year . . . . .	564,800	36,838,700	10,764,600	70,334,600	2,708,700	444,700	211,200
Issued to non-accounting Postmasters on credit during the year. . . . .	.....	159,400	38,900	228,200	13,800	1,250	.....
Stamps destroyed as unfit for use. . . . .	510	16,091	7,206	31,482	928	145	322
Stamps, &c., on hand, 30th June, 1891. . . . .	52,700	6,356,800	248,500	3,119,900	413,100	196,850	38,800
	618,010	43,370,991	11,059,206	73,714,182	3,136,528	642,945	250,322

Value of the Issue during the year, to 30th June, 1891, \$3,226,386.10. The total Stamp Issue of the



## Cards and Stamped Envelopes, for the Year ended 30th June, 1891.

IPTS.

15 cent Stamps.	2 cent Registered Stamps.	5 cent Registered Stamps.	Post Bands.	1 cent Post Cards.	2 cent P. U. Cards.	2 cent Reply Cards.	1 cent Envelopes.	3 cent No. 1 Envelopes.	3 cent No. 2 Envelopes.	Value.
										8 cts.
106,250	200	969,650	79,100	895,000	18,900	43,800	20,500	4,900	18,100	916,876 30
.....	.....	1,500,000	472,000	19,848,000	40,000	81,000	40,000	103,000	130,000	2,526,699 00
.....	14,850	2,250	.....	26,400	.....	.....	.....	.....	.....	5,273 50
68	1,656	1,671	741	1,601	250	24	.....	4	.....	1,497 09 $\frac{3}{10}$
.....	1,250	2,400	100	23,800	400	.....	.....	.....	.....	7,447 75
106,318	17,956	2,475,971	551,941	20,794,801	59,550	124,824	60,500	107,904	148,100	3,457,793 64 $\frac{3}{10}$

U.E.

75,200	14,850	2,154,350	514,200	19,897,300	55,100	116,400	51,600	85,300	110,400	3,215,087 10
.....	1,050	15,800	.....	50,500	.....	.....	.....	.....	.....	11,299 00
68	1,656	1,671	741	1,601	250	24	.....	4	.....	1,497 09 $\frac{3}{10}$
31,050	400	304,150	37,000	845,400	4,200	8,400	8,900	22,600	37,700	229,910 45
106,318	17,956	2,475,971	551,941	20,794,801	59,550	124,824	60,500	107,904	148,100	3,457,793 64 $\frac{3}{10}$

previous year was \$3,045,425.15, showing a comparative increase in Issue for the present year of \$180,960.95.

## DEAD LETTERS.

During the year ended 30th June, 1891, 973,530 letters, circulars, post cards, &c., passed through, and were dealt with in the Dead Letter Branch of the Canada Post Office, as shown by the following classification:—

Dead letters originating in Canada, returned as undelivered by the British post office.....	11,159
Dead letters originating in Canada, returned as undelivered by the United States post office.....	99,383
Dead letters originating in Canada, returned as undelivered by British colonies and Foreign countries.....	1,538
	<hr/>
	112,080
Less—Registered letters included therein and transferred to registered class.....	1,662
	<hr/>
	110,418
Dead letters, circulars, post-cards, &c., returned from Canada post offices.....	771,458
Dead letters registered being found to contain value.....	14,252
Dead letters, circulars, post-cards, &c., sent to the Dead Letter branch for special reason, such as insufficient address, non-payment of postage, &c.....	*77,402
	<hr/>
	973,530
	<hr/>

## REQUEST LETTERS.

As some misunderstanding appears to exist with respect to *Request Letters*, it may be well to state that only those letters mailed in Canada and addressed to places in the Dominion, upon which is *printed* a request that they may be returned to the address given if not delivered within a specified time, can be regarded as *Request Letters*, and be returned to the writers without going to the Dead Letter office.

Letters having the printed address of the sender thereon, but without a specific request to return if not delivered within a certain time, cannot be treated as *Request Letters*; such letters will, however, be returned *unopened* from the Dead Letter office.

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\* NOTE.—Of this number 3,225 were registered or contained articles of value, the remainder 74,177 being ordinary letters, &c.

## PRINTING AND SUPPLY.

The usual statement showing in detail the operations of the Printing and Supply Branch of the Post Office Department will be found in the appendix.

The total amount of all payments made for printing, stationery, mail bags, Letter Carriers' uniforms, stamping material, scales and weights supplied for the use of the department at Ottawa, and for the outside service in the several Provinces of the Dominion, through the Printing and Supply Branch from 1st July, 1890, to 30th June, 1891, was \$114,960.31—the expenditure for 1889-90 was \$102,975.73, so that at first sight there would appear to be a considerable increase in this year's expenditure, but, as was pointed out in the report of last year, there were circumstances of an exceptional character affecting the outlay for that year which are not likely to occur again. The cost for the year ended 30th June, 1889, was \$111,593.95, so that the outlay for the past year would, when the increase of business is taken into account, show that the supervision over this branch of the Post Office service has been so thorough as to keep the expenditure down to the lowest point compatible with the efficiency of the public service.

## REVENUE AND EXPENDITURE.

STATEMENT of the Revenue of the Post Office Department of the Dominion of Canada, for the Year ended the 30th June, 1891.

	\$	cts.	\$	cts.
Balances due by Postmasters on old Revenue account, on 30th June, 1890			24,840	19
Postage stamps, post cards, &c.	3,185,965	89		
Less—Lost by railroad fire in transit to British Columbia	4,317	50		
			3,181,648	39
Postage paid in money on letters delivered			16,006	76
do on newspapers			2,442	03
Postage collected by Letter Carriers			344	32
Rents of letter-boxes and drawers			23,121	59
Transit postage from Turk's Island, from 1st Jan., 1890, to 31st Dec., 1890			15	12
Postage on parcels from Great Britain, from 1st Jan., 1889, to 31st Dec., 1890			21,094	22
Other miscellaneous receipts			1,782	31
Commission received on Money Orders			99,487	49
Profit in exchange on Money Order business with other countries			2,179	46
Void money orders, that is, money orders issued between 1st July, 1889, and 30th June, 1890, payment of which had not been claimed up to 30th June, 1891			1,925	78
Gross Revenue			3,374,887	66
DEDUCTIONS.				
Salaries, forward allowances, allowances towards rent, fuel and light, and compensation to Postmasters on Money Order business	777,575	00		
Discount to Stamp Vendors	16,040	66		
Short paid mis-sent and dead letters	2,109	94		
Other miscellaneous disbursements	662	22		
Amount paid for the redemption of postage stamps	2,330	77		
Postage on parcels to Great Britain, from 1st Jan., 1889, to 31st Dec., 1889	777	82		
do Newfoundland, from 1st Jan., 1890, to 31st Dec., 1890	23	90		
Transit rates on mail matter passing between Newfoundland and Canada, from 1st Jan., 1890, to 31st Dec., 1890	2,824	44		
Transit rates on mail matter passing through the United States for other countries, from 1st Jan., 1890, to 31st Dec., 1890	28,991	56		
Balance of commission paid to other countries on Money Order business	3,457	95		
Cost of remittances to the United States on Money Order business	67	98		
Losses by fire, burglary, &c.	392	26		
Balances due by Postmasters on old Revenue account, on 30th June, 1891	23,809	72		
			859,064	22
Net Revenue			2,515,823	44



STATEMENT of the Expenditure of the Post Office Department of the Dominion of Canada,  
for the Year ended 30th June, 1891.

	Paid by Cheque from Par- liamentary Appropriation
	\$ cts.
Conveyance of mails by land.....	769,302 47
do do steamboats, &c.....	76,778 86
do do railways.....	1,041,992 40
Making and repairing mail bags and locks.....	30,124 56
Total.....	1,918,198 29
Salaries paid by cheque.....	1,056,399 88
Travelling expenses.....	19,792 81
Tradesmen's bills.....	70,801 98
Rent and taxes.....	1,968 33
Stationery, printing and advertising.....	53,422 85
Miscellaneous disbursements paid by cheque.....	41,091 58
Total Expenditure by Cheque.....	3,161,675 72
Amount paid out of Revenue.....	835,254 50
Balance due on old Revenue Account.....	23,809 72
	4,020,739 94

For the year ended 30th June, 1891, the gross postal revenue was \$3,374,887.66, being an increase over the revenue of the previous year of \$151,273.03.

The expenditure for the same period was \$4,020,739.94, an increase of \$80,044.35 over that of the year before.

It will thus be seen that the increase in the revenue is about 4½ per cent, but the increase in the expenditure is only a small fraction over 2 per cent, so that the revenue continues to increase in much greater proportion than the expenditure.

The difference between revenue and expenditure for the year ended 30th June, 1891, was \$645,852.28, whilst the difference for the year ended 30th June, 1888, amounted to \$782,258.00.

The following statement will show the extraordinary development of the Post Office operations during the last twenty years:—

Year ended	Revenue.	Expenditure.
30th June, 1871.....	\$ 765,059 77	\$ 837,406 95
do 1881.....	1,767,162 70	2,332,398 80
do 1891.....	3,374,887 66	4,020,739 94

MONEY ORDERS.

On the 30th June, 1891, there were 1,080 Money Order offices in operation in the Dominion, an increase of 53 over the number in the year previous. The distribution by provinces is as follows :—

Ontario .....	560
Quebec .....	171
Nova Scotia .....	147
New Brunswick .....	97
Prince Edward Island .....	11
Manitoba .....	36
North-West Territories .....	24
British Columbia .....	34
	<hr/> 1,080 <hr/>

The accompanying tables exhibit the Money Order transactions of Canada, both domestic and foreign, for the year ended 30th June, 1891.

The interchange of Money Orders between Canada and the United Kingdom and foreign countries was as follows :—

COUNTRY.	ISSUED IN CANADA.		PAYABLE IN CANADA.	
	Number.	Amount.	Number.	Amount.
		\$		\$
*United Kingdom .....	75,776	975,378	23,688	381,452
United States .....	134,605	1,469,819	87,686	1,465,904
France .....	3,465	38,275	968	22,983
Germany .....	2,076	31,265	377	10,462
Italy .....	1,736	48,061	31	939
Switzerland and Roumania .....	371	5,090	128	2,963
Belgium .....	709	11,474	289	8,654
Newfoundland .....	1,776	28,265	3,138	73,545
Jamaica .....	82	1,722	208	5,344
Japan .....	180	5,069	55	996
Australasian Colonies and New Zealand .....	443	9,708	494	11,118
Total .....	221,219	2,624,126	117,062	1,984,360

\* Including all those British possessions and foreign countries between which and Canada there is not a direct exchange of Money Orders.

It will be observed that whilst the total number of Money Orders issued in Canada during the year has slightly increased, the total value is somewhat less. The number of orders paid in Canada is considerably in excess of the number paid last year, and there is a corresponding increase in the value of orders paid.

TABLE showing the Amount of Money Order transactions between the Dominion of Canada and other Countries, year by year, from 1st July, 1867, to 30th June, 1891.

Year ended 30th June.	UNITED STATES.		UNITED KINGDOM.		FRANCE.		GERMANY, DENMARK, SWEDEN AND NORWAY.		ITALY.		SWITZERLAND AND ROMANIA.		BELGIUM.		NEWFOUND- LAND.		JAMAICA.		JAPAN.		AUSTRALASIA'S COLONIES AND N. ZEALAND.	
	Amount of Money Orders issued in Canada.	%	Amount of Money Orders issued in Canada.	%	Amount of Money Orders issued in Canada.	%	Amount of Money Orders issued in Canada.	%	Amount of Money Orders issued in Canada.	%	Amount of Money Orders issued in Canada.	%	Amount of Money Orders issued in Canada.	%	Amount of Money Orders issued in Canada.	%	Amount of Money Orders issued in Canada.	%	Amount of Money Orders issued in Canada.	%	Amount of Money Orders issued in Canada.	%
1868			389,796	87.437											3,321	3.142						
1869			367,092	94.308											3,246	6.514						
1870			415,383	110.585											3,246	7.328						
1871			474,376	121.644											4,321	5.049						
1872			577,443	142.301											3,656	4.928						
1873			665,407	156.888											4,799	3.807						
1874			661,501	171.487											5,753	6.014						
1875			572,246	174.100											1,197	6.980						
1876	212,135	156.134	491,363	194.680											3,305	8.499						
1877	276,821	207.889	409,474	188.116											3,699	12.280						
1878	328,264	246.586	383,808	189.082											6,245	23.076						
1879	335,200	308.256	361,940	176.067											5,061	21.509						
1880	420,966	494.637	397,589	181.561											3,570	22.452						
1881	610,094	807.372	430,686	175.461											4,883	19.901						
1882	781,167	1,003.079	550,150	170.304											4,309	20.644						
1883	1,023,548	1,015.358	827,200	196.467											5,415	24.448						
1884	1,190,852	959.691	862,822	259.738											1,295	29.150						
1885	1,288,245	820.046	779,679	297.563	16,100	5,612	11,482	592	3,804	696	1,146	3,343	6,632	37.863	696	6.481	777	4.039			3,854	4.051
1886	1,232,000	861.347	753,743	294.484	16,720	18,475	20,425	7,447	30,632	865	3,702	1,356	2,113	4,550	6,467	40.092	718	8.557			5,110	4.521
1887	1,262,382	1,096.303	837,146	304.115	20,409	12,717	40,318	9,780	48,000	1,331	3,069	1,661	3,726	4,686	11,997	42.114	1,527	15,509			9,573	8,829
1888	1,297,734	1,283.091	958,001	328.674	27,077	13,656	39,797	9,782	31,478	1,517	3,920	2,007	7,305	3,812	22,177	51.482	1,635	18,462			6,069	7,477
1889	1,391,743	1,291,103	1,033,331	363.657	31,719	13,833	30,929	10,518	32,044	1,654	3,255	2,469	13,876	4,937	24,055	63.814	1,035	18,402			7,318	13,525
1890	1,471,946	1,332.196	1,000,460	383.263	33,190	17,675	34,093	9,804	39,636	1,067	4,247	3,523	15,764	4,743	26,942	73.555	1,712	19,450			9,448	14,121
1891	1,469,819	1,465.904	975,378	381,432	38,275	22,983	31,265	10,462	48,061	939	5,090	2,963	11,474	8,654	28,265	73.545	1,722	5,344			9,327	14,398
																					5,069	9,708
																						11,118

\* Nine months business only, from 1st October, 1883. † Eight months business only, from 1st November, 1884. ‡ Including Money Orders payable in several countries that have no direct exchange of Money Orders with Canada. § Nine months business only, from 1st October, 1889.



TABLE showing the General Operations of the Money Order System in the Dominion of Canada, year by year, from 1st July, 1867, to 30th June, 1891.

Year ended 30th June.	Number of Money (Order Offices.	Total Number of Money Orders Is- sued.	Total Amount of Money Orders Is- sued.	WHERE PAYABLE.				Amount of Orders Issued in other Countries payable in Canada.	Gross Revenue from Fees on Money Orders, profit on Foreign Exchange, &c.		Expenditure for Sal- aries, Compensa- tion to Postmas- ters, Printing, Sta- tionery and Mis- cellaneous.		Losses sustained in conducting the Money Order sys- tem.		
				In Canada.		In other Countries.			%	cts.	%	cts.		%	cts.
				cts.	%	cts.	%								
1868.....	515	90,163	3,352,881 40	2,959,762 80	393,118 60			90,579 92	29,942 57	30,655 65		2,355 55			
1869.....	550	96,627	3,563,644 95	3,193,305 77	370,339 18			100,822 84	30,435 12	32,594 17		3,169 99			
1870.....	558	110,021	3,910,249 95	3,489,610 00	420,639 95			117,913 89	33,477 71	31,746 97		1,584 74			
1871.....	571	120,521	4,546,433 85	4,067,735 17	478,698 68			126,694 06	38,495 55	33,925 68					
1872.....	634	136,422	5,154,120 13	5,573,019 76	581,100 37			147,230 16	44,682 25	40,366 85		478 35			
1873.....	644	161,096	6,239,505 86	5,569,298 00	670,206 86			160,695 80	53,019 45	42,271 89					
1874.....	662	174,851	6,757,427 17	6,090,172 61	667,254 56			177,501 49	59,263 36	47,362 18		118 94			
1875.....	687	181,091	6,711,538 98	6,132,094 67	579,444 31			181,091 07	54,360 22	49,416 12		796 64			
1876.....	736	238,668	6,866,618 24	6,157,813 48	708,805 06			359,314 21	54,809 59	56,269 25		4,239 21			
1877.....	754	253,962	6,856,821 13	6,164,825 99	691,995 14			408,285 99	54,847 50	51,740 06		6,166 49			
1878.....	769	269,417	7,130,895 77	6,412,576 78	718,318 99			438,745 80	56,847 03	49,112 00		636 68			
1879.....	772	281,725	6,788,723 29	6,086,521 05	702,202 24			505,833 69	55,008 42	47,222 93		147 00			
1880.....	775	306,088	7,207,337 06	6,385,210 86	822,126 20			698,651 87	58,276 28	46,287 42		286 20			
1881.....	786	338,238	7,725,212 66	6,679,547 44	1,045,665 22			1,002,734 96	60,835 25	47,722 80		161 26			
1882.....	806	372,248	8,354,153 57	7,018,326 04	1,335,827 53			1,194,028 92	65,392 04	52,149 62		110 78			
1883.....	828	419,613	9,490,899 62	7,634,735 27	1,856,164 35			1,236,274 95	65,485 20	73,035 92		58 85			
1884.....	866	463,502	10,067,834 85	7,971,919 70	2,095,915 15			1,262,807 31	68,870 31	77,499 12		882 61			
1885.....	885	499,243	10,384,210 99	8,254,003 12	2,130,207 87			1,185,750 92	73,592 86	68,211 35		4,295 59			
1886.....	910	529,458	10,231,180 39	8,146,095 87	2,085,093 52			1,245,957 32	71,734 83	76,216 09		25 39			
1887.....	933	574,899	10,328,984 51	8,093,886 92	2,235,097 59			1,495,673 58	79,325 86	76,845 15		1,179 14			
1888.....	944	630,968	10,916,617 83	8,520,775 78	2,395,842 05			1,726,011 45	81,077 39	83,309 21		3,112 85			
1889.....	990	673,813	11,205,919 95	8,692,418 91	2,573,501 04			1,756,944 74	92,047 98						
1890.....	1,027	780,503	11,997,861 62	9,359,434 48	2,638,427 14			1,851,058 76	96,067 40						
1891.....	1,080	855,619	12,478,178 46	9,854,052 46	2,624,126 00			1,984,360 46	100,066 80						

a. This increase in the cost of management arises from the exhibition, for the first time, as a charge against the Money Order System, of the salaries of Clerks in City Post Offices, engaged exclusively in Money Order duties; also, from the preliminary expenses incurred in organizing Money Order Exchange with a number of additional Countries, as stated in the report for the year ended 30th June, 1888.

b. Including the amount of the "Void" Orders of the previous years.

c. Including payment for services partly chargeable to preceding year.

\* Under the recently introduced system of accounts, these items can no longer be given separately.

## POST OFFICE SAVINGS BANK.

The facilities for transmitting mails safely and speedily to and from the Head Office must always form a leading consideration in the establishment and distribution of Savings Banks. Their multiplication, therefore, in the remoter parts of the Dominion, depends largely upon the extension of the railway system. During the year 140 offices were added to the list, making 634 as the total number in operation on the 30th June. At no point was it necessary either to withdraw or suspend operations—the deposits at each office, so far as known, having been promptly and faithfully reported.

During the fiscal year the deposits were, in number, 147,672, and in amount, \$6,500,372; and the withdrawals 84,963 in number, and \$7,875,977.57 in amount; the average deposit was \$44.02 and the average withdrawal \$92.67. There were 29,791 accounts opened and 32,006 closed. The total number of accounts remaining open at the close of the period was 111,230, and the aggregate balance due to depositors \$21,738,648.09, making the average amount at the credit of each depositor \$195.44.

A classification of the deposits received during the year has been made, showing the following results:—

53,217	from \$	1	up to	\$10.
26,427	"	11	"	20.
37,561	"	21	"	50.
17,685	"	51	"	100.
7,965	"	101	"	200.
4,091	"	201	"	400.
407	"	401	"	600.
147	"	601	"	800.
172	"	801	"	1,000.

As in previous annual reports, a tabular statement showing consecutively, year by year, the business of the Savings Bank since its establishment (1868) is appended.

The agencies of the Dominion Government Savings Bank at Antigonish, N.S., and Nanaimo, B.C., were closed during the year, and the depositors' accounts transferred to the Post Office Savings Bank. The number of accounts thus assumed was 1,124 and the amount \$389,169.28.

The interest allowed with the expenses of management added show that the money on deposit in the Savings Bank cost the Government  $3\frac{1}{2}\frac{3}{4}$  per cent.

## STATEMENT of the Business of the Post Office Savings Bank, Canada, year by year, from 1st April, 1868, to 30th June, 1891.

PERIOD.	Number of Post Office Savings Banks at close of period.	Number of deposits received during period.	Cost of maintaining the Post Office Savings Bank.										Total Amount standing to the credit of all Open Accounts, inclusive of Interest allowed, at close of period.	Average amount standing to credit of each Open Account at close of period.					
			Total amount of deposits received during period.	Average amount of each deposit received during period.	Amount of depositors' accounts transferred from Dominion Government Savings Bank during period.	Number of withdrawals during period.	Total amount withdrawn during period.	Average amount of each withdrawal during period.	Number of accounts opened during period.	Number of depositors' accounts transferred from Dominion Government Savings Bank during period.	Number of accounts closed during period.	Number of accounts remaining open at close of period.			Total expenses of Management, including Salaries, Compensation, Postage, Inspection, Printing, Stationery, &c.	Average cost of each Transaction, viz.: of each Deposit or Withdrawal.	Percentage of Cost of Management to Balance due to Depositors.	Losses sustained.	Interest allowed to Depositors.
			\$	\$	\$	*	\$	\$				\$	\$		\$	\$	\$	\$	
Three months ended 30th June, 1868.	81	3,247	212,507	65.44		166	8,857.48	53.35	2,146		44	2,102	8,389.43				939.37	204,588.89	97.33
Year ended 30th June, 1869.	213	16,653	927,885	55.71		4,787	296,754.35	61.99	6,429		1,319	7,212	5,808.14	0.23 $\frac{1}{16}$	0.67		21,094.72	856,814.26	118.80
Year ended 30th June, 1870.	226	24,994	1,347,901	53.93		9,478	664,555.51	70.11	7,823		2,857	12,178	8,128.12	0.20 $\frac{1}{16}$	0.51		48,689.08	1,588,848.83	130.41
Year ended 30th June, 1871.	230	33,256	1,917,576	57.66		15,148	1,093,438.86	72.10	9,424		4,449	17,153	11,108.40	0.20	0.44		84,273.68	2,497,259.65	145.59
Year ended 30th June, 1872.	235	39,489	2,261,631	57.27		20,154	1,778,565.19	81.33	10,846		6,940	21,059	12,242.34	0.20 $\frac{1}{16}$	0.39		116,174.55	3,096,500.01	147.04
Year ended 30th June, 1873.	239	44,413	2,306,918	51.94		23,800	2,323,299.32	86.91	11,995		9,528	23,526	15,093.78	0.22 $\frac{7}{16}$	0.47		126,932.88	3,207,051.57	136.32
Year ended 30th June, 1874.	266	45,329	2,340,284	51.63		25,814	2,468,643.42	86.04	12,048		10,606	24,968	14,442.71	0.20 $\frac{7}{16}$	0.45		126,273.31	3,204,965.46	128.36
Year ended 30th June, 1875.	268	42,508	1,942,346	45.69		25,954	2,341,979.04	82.88	10,516		11,190	24,294	12,539.59	0.18 $\frac{1}{16}$	0.42		120,758.06	2,926,090.48	120.44
Year ended 30th June, 1876.	279	38,647	1,726,204	44.66		24,152	2,021,457.97	77.11	10,218		10,097	24,415	14,662.14	0.23 $\frac{1}{16}$	0.53		110,116.08	2,740,952.59	112.27
Year ended 30th June, 1877.	287	36,126	1,521,000	42.10		22,484	1,726,082.98	70.49	8,971		9,312	24,074	15,149.13	0.26 $\frac{1}{16}$	0.57		104,067.86	2,639,937.47	109.60
Year ended 30th June, 1878.	295	40,097	1,724,371	43.00		21,944	1,713,658.73	70.55	10,058		8,597	25,535	15,266.08	0.25	0.55	6,126.67	103,834.29	2,754,484.03	107.87
Year ended 30th June, 1879.	297	43,349	1,973,243	45.52		23,226	1,733,443.79	66.07	10,755		8,845	27,445	16,100.03	0.24 $\frac{1}{16}$	0.51		110,912.56	3,105,190.80	113.14
Year ended 30th June, 1880.	297	56,031	2,720,216	48.55		26,716	2,015,813.16	69.89	14,407		10,487	31,365	19,134.14	0.23 $\frac{1}{16}$	0.49		136,075.47	3,945,669.11	125.80
Year ended 30th June, 1881.	304	71,747	4,175,042	58.19		28,510	2,097,389.15	73.56	18,731		10,491	39,605	23,223.99	0.23 $\frac{1}{16}$	0.37		184,904.81	6,208,226.77	156.75
Year ended 30th June, 1882.	308	97,380	6,435,989	66.09		35,859	3,461,619.31	96.53	25,778		13,920	51,463	29,245.68	0.21 $\frac{1}{16}$	0.31	391.00	291,065.07	9,473,661.53	184.08
Year ended 30th June, 1883.	330	109,489	6,826,266	62.35		45,253	4,730,995.39	104.54	27,127		17,531	61,059	31,180.03	0.20 $\frac{1}{16}$	0.26		407,305.17	11,976,237.31	196.13
Year ended 30th June, 1884.	343	109,388	6,441,439	58.88		56,026	5,649,611.13	100.84	26,562		20,939	66,682	34,168.95	0.20 $\frac{1}{16}$	0.26		477,487.46	13,245,552.64	198.63
Year ended 30th June, 1885.	355	116,576	7,098,459	60.89		59,714	5,793,031.84	97.01	27,591		20,951	73,322	35,751.23	0.20 $\frac{1}{16}$	0.24		539,560.51	15,090,540.31	205.81
Year ended 30th June, 1886.	392	126,322	7,645,227	60.52		62,205	6,183,470.60	99.40	29,103		21,555	80,870	41,358.11	0.21 $\frac{1}{16}$	0.24	341.49	607,075.38	17,159,372.09	212.18
Year ended 30th June, 1887.	415	143,076	8,272,041	57.81		65,853	6,626,067.51	100.62	31,874		22,585	90,159	43,661.25	0.20 $\frac{1}{16}$	0.22	150.00	692,404.57	19,497,750.15	216.26
Year ended 30th June, 1888.	433	155,978	7,722,330	49.51	217,385.10	78,229	7,514,071.78	96.05	37,515	723	26,704	101,693	44,348.93	0.19	0.21		765,639.15	20,689,032.62	203.44
Year ended 30th June, 1889.	463	166,235	7,926,634	47.67	1,085,979.72	84,572	7,532,145.56	89.06	38,049	2,962	29,581	113,123	51,954.46	0.20 $\frac{7}{16}$	0.22		841,921.79	23,011,422.57	203.41
Year ended 30th June, 1890.	494	154,678	6,599,896	42.67	167,501.53	90,151	8,575,041.98	95.12	32,127	570	33,499	112,321	51,132.07	0.20 $\frac{8}{16}$	0.23	3,653.37	786,875.37	21,990,653.49	195.78
Year ended 30th June, 1891.	634	147,672	6,500,372	44.02	389,169.28	84,963	7,875,977.57	92.67	29,791	1,124	32,006	111,230	60,193.65	0.25 $\frac{1}{16}$	0.27	200.00	734,430.89	21,738,648.09	195.44





The fourth Universal Postal Union Congress met at Vienna, Austria, on the 20th May, 1891, and continued in session for six weeks. At this Congress Canada was ably represented by the High Commissioner at London, the Hon. Sir Charles Tupper, Bart., C.B., G.C.M.G.

The principal measures agreed upon, which are of practical interest to Canada, were (1) the admission of the Australian Colonies to the Postal Union; (2) the issue of reply post cards by every country of the Union; (3) the increase of the limits of size for sample packets; (4) the treatment as unpaid letters of the post cards of one country posted in another; (5) the arrangement that letters posted on board mail steamers when at sea should be prepaid by means of the postage stamps of the country to which the packet belongs, or under whose flag she sails; but that when a mail steamer is in port the letters posted on her should be prepaid with the stamps of the country in whose waters she is.

Other arrangements were made with reference to (1) the exchange of closed mails with ships of war on foreign stations; (2) the treatment of undelivered letters; (3) the establishment of a central clearing house for adjusting the transit postage accounts between the countries of the Union; (4) the repression of attempts to defraud by the use of forged or cleaned stamps.

It was agreed that the meeting of the next Congress should be held at Washington, D.C., United States.

A direct parcel post exchange went into operation with Japan on the 18th October, 1890; and with Barbados on the 18th April, 1891. The general regulations governing these exchanges are practically the same as in the case of that with the United Kingdom. Negotiations are in progress for the establishment of a direct parcel post with other islands in the West Indies and with Hong Kong.

In a large Department like the Post Office, with a business extending not only over the great railway lines from the Atlantic to the Pacific, but into the remotest settlement in the backwoods, and almost to the shores of the Arctic Ocean; it becomes at once apparent how greatly the success of its operations depends upon the cordial co-operation of those to whom the supervision of these operations is entrusted, and for that cordial co-operation, in its fullest extent, I have to offer my sincere thanks to the officers of both the inside and outside service.

WILLIAM WHITE,

*Deputy Postmaster General.*





## BARRIE POSTAL DIVISION.

DETAIL of all payments for Mail Transportation in Barrie Postal Division, made within the year ended 30th June, 1891.

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					8 cts.
Ahmie Harbour and Parry Sound..	T. W. Quinn...	32	3	12 months (less fine)....	450 00
Ahmie Harbour and Wharf.....	S. Paul.....	1	3	Season 1890.....	22 25
Ahmie Lake and Spence.....	J. McCartney..	9	1	12 months.....	60 00
Allandale and Barrie.....	A. McCarthy.....			Special trips; washout on railway.....	2 10
Allandale and Holly.....	W. Armstrong..	3	6	12 months.....	115 00
Allandale and Painswick.....	W. Thompson..	3 $\frac{1}{2}$	6	9 do (to Dec. 31, '90) ..	112 50
do do.....	C. T. Hunter..	3 $\frac{1}{2}$	6	3 do from do.....	37 50
Allandale and Railway Station.....	M. J. Hamlin ..	3 $\frac{1}{2}$	36	12 do.....	120 00
Allensville and Mail Catching Post.	J. McNicol.....	4	6	12 do.....	78 25
Allensville and Utterson.....	do.....	4	3	12 do.....	54 95
Alliston and Elm Grove.....	S. Berridge.....	14r.t.	6	6 do (to Sept. 30, '90) ..	150 00
do do.....	M. Tebo.....	14r.t.	6	6 do from do.....	99 50
Alliston and Rosemont.....	T. Langley.....	9	6	12 do.....	270 00
Alliston and Railway Station.....	do.....	1 $\frac{1}{2}$	12	6 do (to Sept. 30, '90) ..	24 50
do do.....	do.....	1 $\frac{1}{2}$	24	6 do from do.....	49 00
Alport and Bracebridge.....	H. F. Bickmore..	4	3	12 do.....	117 75
Angus and Baxter.....	J. M. Coulson..	6	2	12 do.....	90 00
Angus and Railway Station.....	W. J. Smith.....	1 $\frac{1}{2}$	12	9 do (to Dec. 31, '90) ..	45 00
do do.....	H. L. Tar Bush..	1 $\frac{1}{2}$	12	3 do from do.....	15 00
Anten Mills and Railway Station..	J. McLaughlin..	1 $\frac{1}{2}$	6	12 do.....	110 00
Antioch and Grassmere.....	F. Widdess.....	10	1	12 do.....	52 00
Apto and Phepston Station.....	H. O'Neill.....	6	6	12 do.....	180 00
Ardrea and Orillia.....	W. Blair.....	9	2	12 do.....	160 00
Ashdown and Bear Cave.....	H. Bishton.....	8	1	12 do.....	40 00
Ashdown and Edgington.....	W. Bond.....	14	1	12 do.....	100 00
Ashdown and West Grove.....	M. E. West.....	4	1	12 do.....	40 00
Atherley and Railway Station.....	E. Lanigan.....	1	12	12 do.....	160 00
Athlone and Tottenham.....	S. E. Turner.....	17 $\frac{1}{2}$ r.t.	6	12 do.....	220 00
Auguston and Horning's Mills.....	W. August.....	3	2	12 do.....	23 00
Avening and Railway Station.....	J. Pingle.....	1 $\frac{1}{2}$	12	6 do (to Sept. 30, '90) ..	60 00
do do.....	do.....	1 $\frac{1}{2}$	24	6 do from do.....	120 00
Axe Lake and Charlinch.....	J. McPherson..	7	1	4 do (to July 31, '90) ..	13 33
Axe Lake and Sprucedale.....	do.....	10 $\frac{1}{2}$	1	8 do (from Aug. 1, '90) ..	53 33
Badjeros and McIntyre.....	N. D. McKinnon	3 $\frac{1}{2}$	3	5 do (to Aug. 31, '90) ..	25 00
Bala and Glen Orchard.....	I. White.....	8	2	9 do (to Dec. 31, '90) ..	54 40
Bala and Sahanatian.....	L. Sahanatian ..	9	1	12 do.....	50 00
Baldwin and Railway Station.....	L. Grylls.....	1 $\frac{1}{2}$	6	12 do.....	52 00
Balsam Grove and Fenelon Falls ..	J. Copp.....	6	2	12 do.....	85 00
Balsam Lake and Victoria Road ..	J. W. Cunningham	4	2	12 do.....	72 00
Banbury and Sprucedale.....	J. Barry.....	7	1	4 do (to July 31, '90) ..	15 00
Banda and Glencairn.....	J. D. Carveth..	2 $\frac{1}{2}$	6	12 do.....	170 00
Banks and Collingwood.....	W. Johnson.....	8	2	12 do.....	130 00
Bardsville and Falkenburg.....	C. Bard.....	6 $\frac{1}{2}$	2	9 do (to Dec. 31, '90) ..	47 25
Barkway and Washago.....	R. C. Benn.....	20	2	12 do.....	130 00
Barkerton and Commanda.....	R. Barrett.....	16	3	7 do (to Oct. 31, '90) ..	230 41
Barkerton and Railway Station.....	M. Corkery.....	1 $\frac{1}{4}$	6	7 do do less fine.....	28 66
Barrie and Hillsdale.....	C. Davis.....	16	6	12 do.....	275 00
do do.....	J. Bailey.....			Special trips.....	10 00
Barrie and Josephine, &c.....	G. G. Smith.....			Special trip; washout on railway.....	7 00
Barrie and Midhurst.....	do.....	5	3	12 months.....	93 00
Barrie and Phepston, &c.....	H. O'Neill.....			Special trips; washout on railway.....	19 00
Barrie and Railway Station.....	W. H. Crosby..	1 $\frac{1}{6}$	66	12 months.....	236 58
Barrie and Street Letter Boxes.....	M. Murphy.....	5	18	12 do.....	250 00
Batteau and Railway Station.....	W. Bouchier.....	1 $\frac{1}{6}$	12	12 do.....	46 95
Battle Hall and Cooper's Falls.....	A. Cooper.....	10	1	12 do.....	50 00

DETAIL of all payments for Mail Transportation in Barrie Postal Division,  
&c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					8 cts.
Baysville and Bracebridge.....	F. Sander .....	16	6	6 months (to Sept. 30, '90)	150 00
do do .....	H. McQuarrie .....	16	6	6 do from do .....	199 50
Baysville and Dorset.....	G. F. Marsh.....	16	1	12 do .....	100 00
Baysville and Maple Ridge.....	J. Garrison.....	8	1	5 do 9 days, to Nov. 29, '90.....	24 00
Baysville and Menomonee.....	G. Utting .....	5	1	12 do .....	45 00
Bayview and Morley .....	J. Lennor .....	11	2	12 do .....	140 00
Beatrice and Falkenburg .....	M. Moore .....	4	3	Part of Seasons '89-90 and 1890-91.....	16 80
do do .....	R. Lance .....	4	3	Part of Season 1890-91 .....	26 00
Beaverton and Railway Station.....	A. Hamilton.....	24	12	12 months .....	160 00
Beeton and Railway Station .....	H. E. Kinsey .....	12	12	do .....	131 36
Bell Ewart and Lefroy Station.....	F. McKay .....	1	12	do .....	80 00
Bell Ewart and Roach's Point.....	T. Ellis .....	2	6	Season 1890 .....	51 00
Berriedale and Denville .....	J. A. Crawford.....	5	3	12 months .....	117 00
Berriedale and Hartfell.....	J. B. Duke .....	8	2	12 do .....	149 00
Berriedale and Railway Station.....	J. A. Crawford.....	13	3	12 do .....	39 00
Black Bank and Lisle.....	N. Duffin.....	10	3	12 do .....	200 00
Blackwater and Railway Station.....	J. Ruddy.....	10	24	3 do (to June 30, '90).....	15 65
do do .....	J. H. Chant.....	10	24	9 do from do .....	46 95
Blount and Glen Cross.....	W. Woods.....	24	3	12 do .....	39 00
Boubaygeon and Lindsay.....	H. Workman.....	22	6	12 do .....	900 00
Bourdeau and Sprucedale.....	W. H. Rhamey.....	43	2	12 do .....	50 00
Bracebridge and Fraserburg.....	J. Clark .....	12	1	12 do .....	77 00
Bracebridge and Gravenhurst.....	F. Sander .....	11	6	1 do (to Aug. 31, '90).....	39 00
do do .....	T. Woods.....	11	6	5 do 29 days (to May, 2, '91).....	186 00
Bracebridge and Muskoka Falls .....	A. R. Cameron.....	3	3	12 months .....	89 85
Bracebridge and Point Kaye.....	C. Kay .....	20	2	Part of seasons '89-90 and 1890-91.....	84 00
Bracebridge and Railway Station.....	F. Sander .....	1	12	12 months .....	75 00
do do .....	R. P. Perry.....	1	12	do do .....	75 00
Bracebridge and Wharf .....	F. Sander .....	1	12	Season 1890 .....	36 62
Bracebridge and Ziska .....	J. Killen.....	6	2	do .....	44 10
Brackenrig and Port Carling.....	F. J. Davidson .....	4	2	do .....	31 47
Bradford and Newton Robinson.....	J. McDermott.....	9	6	12 months .....	400 00
Bradford and Railway Station.....	do .....	3	24	12 do .....	75 00
Braie Lake and Uplands.....	W. J. Taylor.....	83	1	12 do .....	56 00
Brantley and Mail Catching Post.....	J. Gordon.....	16	12	12 do .....	50 00
Brechin and Dalrymple.....	E. Vickers.....	9	3	12 do .....	186 00
Brechin and Evansdale .....	S. Luck .....	54	3	3 do (to June 30, '90).....	25 00
Brechin and Udny.....	do .....	54	3	9 do from July 1, '90.....	75 00
Brechin and Railway Station.....	M. O'Neil .....	1	12	12 do .....	100 00
Brentwood and Railway Station.....	J. O'Connell.....	1	12	do .....	64 00
Brown Hill and Railway Station.....	J. Brown.....	1	12	do .....	30 00
Burk's Falls and Chetwynd.....	J. A. Rumohr.....	5	1	7 do (to Oct. 31, '90).....	32 08
Burk's Falls and Dunchurch.....	D. McMillan.....	29	3	Part of Seasons 1889-90 and 1890-91.....	133 00
Burk's Falls and Sand Lake .....	J. Hunter .....	16	1	5 months, (from Nov. 1, 1890) .....	33 34
Burk's Falls and Railway Station.....	H. Varcoe .....	1	12	12 do .....	156 50
Burnt River and Rettie's Station.....	R. Moore .....	1	6	7 do (to Oct. 31, '90).....	46 66
do do .....	do .....	1	12	5 do from do .....	41 67
Bury's Green and Fell's Station.....	J. Fell .....	23	2	12 do .....	46 80
Byng Inlet and French River.....	J. Lamondin.....	25	1	Part of Seasons 1889-90 and 1890-91.....	100 00
Byng Inlet North and Parry Sound.....	do .....	65	2	do do .....	460 00
Callander and Railway Station.....	T. Steele .....	1	6	12 months .....	39 00
Callander and Wisawasa.....	R. Graham.....	23	3	12 do .....	78 00
Cambray and Lindsay.....	W. Jackson.....	9	6	12 do .....	270 00
Camerton and Railway Station.....	J. Bryson.....	3	12	12 do .....	120 00
Camilla and Granger.....	W. Dynes.....	63	2	12 do .....	78 00
Camperdown and Changing Post.....	J. Barclay .....	4 rods	12	12 do .....	20 00

DETAIL of all payments for Mail Transportation in Barrie Postal Division,  
&c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					8 cts.
Cannington and Pepperlaw.....	G. Newton.....	10	6	12 months	300 00
Cannington and Railway Station...	W. Cassidy.....	24	12	do	60 00
Cape Rich and Meaford.....	R. Cox.....	10	2	12 do	120 00
Carden and Horncastle.....	G. Sharp.....	4	2	6 do (to Sept. 30, '90).	25 00
do do	P. McCarty.....	4	2	6 do from do	22 50
Cashtown and Creemore.....	W. Cotton.....	2	6	12 do	100 00
Cecebe and Wharf.....	W. A. Cowan.....	4	3	Season 1890.....	22 75
Charlinch and Novar.....	L. Robinson.....	9	2	12 months	100 00
Cheney and Kearney.....	L. Perron.....	5	1	12 do	25 00
Christian Island and Lafontaine...	A. McCue.....	7	1	12 do	75 00
Churchill and Lefroy Station.....	J. Sloan.....	2	12	12 do	220 00
Clarksburg and Heathcote.....	S. C. Rowe.....	5	6	12 do	188 00
Clarksburg and Redwing.....	J. L. G. Conklin	13	3	12 do	217 00
Clarksburg and Railway Station...	W. T. Muller.....	1	24	12 do	195 00
Cley and Juddhaven.....	R. Fullerton.....	1	2	Season 1890.....	24 80
Cley and Ullswater.....	do	4	1	Part of Seasons 1889-90 and 1890-91.....	16 80
Clover Hill and Cookstown.....	H. Coleman.....	2	6	12 months	126 12
Cloverport and Port Carling.....	M. Collins.....			Season 1890.....	27 00
Coboconk and Fenelon Falls.....	C. Bowins.....	16	3	12 months	234 00
Coboconk and Lorneville.....	A. Hume.....	28	6	6 do (to Sept. 30, '90).	487 50
do do	C. Bowins.....	28	6	6 do from do	469 50
Coboconk and Minden.....	W. Leary.....	24	6	12 do	700 00
Coldwater and Lovering.....	S. D. Eplett.....	6	2	12 do	100 00
Coldwater and Moonstone.....	J. Craig.....	6	3	12 do	110 00
Coldwater and Railway Station.....	S. D. Eplett.....	1	24	12 do	200 00
Collingwood and Gibraltar.....	J. Glenn.....	10	1	12 do	52 00
Collingwood and Railway Station.....	D. Darroch.....		36	12 do	250 00
Collingwood and Street Letter Boxes	J. Ferguson.....	3	18	12 do	200 00
Colwell and Railway Station.....	J. Campbell.....		12	12 do	62 60
Commanda and Loring.....	R. W. Brooks.....	26	1	12 do	200 00
Commanda and Restoule.....	A. O. Smith.....	9	1	12 do	75 00
Commanda and Trout Creek.....	R. Barrett.....	16	3	5 do (from Nov. 1, '90)	164 59
Connor and Palgrave Station.....	J. Fleming.....	7	6	12 do	219 00
Cookstown and Railway Station.....	H. Coleman.....		12	6 do (to Sept. 30, '90).	37 50
do do	do		24	6 do from do	75 00
Cooper's Falls and Lewisham.....	W. Lowe.....	12	2	12 do	120 00
Corbetton and Railway Station.....	J. Corbett.....	30 rods	6	12 do	35 00
Corson's Siding and Head Lake.....	W. Maxwell.....	12	3	6 do (to Sept. 30, '90).	87 50
do do	W. A. Maxwell.....	12	3	6 do from do	80 00
Coulson and Orillia.....	W. Edgerton.....	16	6	12 do	450 00
Craigie Lea and Gregory.....	T. Waters.....	5	2s, 1w	12 do	102 50
Craigleith and Railway Station.....	A. Fleming.....	1	6	12 do	48 00
Creemore and Lavender.....	R. W. Lackie.....	7	3	5 do (to Aug. 31, '90).	56 25
do do	do	13	6	7 do from do	156 33
Creemore and Railway Station.....	A. Gillespie.....	1	12	12 do	126 80
Creswell and Railway Station.....	T. Pearn.....	1	12	12 do	30 00
Crossland and Phelpsston.....	J. Mahoney.....	15	3	12 do (and extra trips).	277 50
Dalston and Orillia.....	J. Harvie.....	40 r. t.	6	12 do	548 00
Dartmouth and Sebright.....	A. & W. Dunn.....	4	3	12 do	69 00
Deerhurst and Gilford.....	R. Baynes.....	4	3	12 do	100 00
Dewé and Parry Sound.....	J. Wright.....	11	1	Season 1890.....	36 25
Doe Lake and Spence.....	M. Gilmour.....	14	2	12 months	100 00
Doe Lake and Utterson.....	N. Hanes.....	32	3	12 do	800 00
Downeyville and Omemeé.....	B. Downey.....	5	6	12 do	160 00
Dufferin Bridge and Emsdale.....	W. Brooks.....	26	3	12 do	589 00
Dufferin Bridge and Waubamick.....	do	26	1	12 do	218 00
Duncan and Heathcote.....	A. McKeown.....	5	1	12 do	44 00
Dunchurch and Glenila.....	W. McAmmond.....	7	2	12 do	90 00
Dundalk and Hopeville.....	R. Scott.....	9	3	12 do	123 24
Dundalk and Kingscote.....	J. Phelan.....	12	2	12 do	129 75
Dundalk and McIntyre.....	N. D. McKinnon	13	3	5 do (to Aug. 31, '90).	83 33
do do	W. J. Robins.....	13	6	7 do from do	210 00



DETAIL of all payments for Mail Transportation in Barrie Postal Division,  
&c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					<div> <div>\$</div> <div>cts.</div> </div>
Dundalk and Maple Valley.....	J. McKenzie.....	12½	3	5 do (to Aug. 31, '90).	70 83
Dundalk and Railway Station.....	G. W. Parsons.....	24	12	do .....	90 00
Duntroon and Maxwell.....	E. Linley.....	14	6	12 do .....	405 00
Duntroon and Railway Station.....	J. Russell.....	12	12	do .....	156 48
Dwight and Huntsville.....	G. F. Marsh.....	13½	2	6 do (to Sept. 30, '90).	97 50
do do .....	D. Kernaghan.....	13½	2	6 do from do ..	95 00
Eden Valley and Main Post Road..	E. Sanderson.....	2	3	12 do .....	50 00
Egbert and Changing Post.....	E. A. Gibson.....	3	6	12 do .....	75 00
Elder and Rosemont.....	C. Conn.....	7½	2	12 do .....	88 00
Elmvale and Gibson.....	J. P. Dean.....	9	3	12 do .....	148 00
Elmvale and Railway Station.....	G. Hunt.....	½	6	12 do .....	31 30
Emberson and Huntsville.....	H. Farnsworth.....	10	1	8 do 27 days (from July 5, '90)...	66 52
Emberson and Port Sydney .....	do .....	12	1	3 do 4 days (to July 4, '90) .....	23 48
Emsdale and Fern Glen .....	C. H. Elliott.....	6	2	12 do .....	80 00
Emsdale and Railway Station .....	J. W. McDonald.....	15	12	12 do .....	62 47
Ennis and Loretto.....	J. O'Leary.....	3½	2	12 do .....	50 00
Ennismore and Frankhill.....	C. Lowes.....	6	1	12 do .....	60 00
Ennismore and King's Wharf.....	J. C. Leary.....	9	2	12 do .....	100 00
Epping and Flesheron.....	G. Mathewson.....	15½	6	12 do .....	399 00
Epping and Meaford.....	W. J. Cann.....	14	6	12 do .....	320 00
Erskine and Markdale.....	J. E. Guy.....	6	2	9 do (to Dec. 31, '90)..	58 50
do do .....	do .....	10	2	3 do from do ..	32 00
Everett and Railway Station.....	W. M. Lockhart.....	1½	12	12 do .....	60 00
Fair Valley and Warminster.....	R. C. Hipwell.....	4	3	12 do .....	72 00
Falkenburg and Mail Catching Post	M. Moore.....	½	6	12 do .....	31 30
Falkenburg and Port Carling.....	F. Foreman.....	16	3	Part of Seasons 1889-90 and 1890-91.....	90 89
Falkenburg and Ullswater.....	M. Moore.....	12½	3	Season 1890 .....	164 50
Fawkham and Mail Catching Post..	W. Carrick.....	2	6	12 months.....	125 00
Fawn and Mail Catching Post.....	A. Gaudaur.....	½	3	12 do .....	34 00
Fenelon Falls and Railway Station.	E. Lansfield.....	12	12	do .....	80 00
Fesserton and Railway Station.....	R. Jancowski.....	12	12	do .....	65 00
Feversham and Flesheron .....	R. Meldrum.....	14	6	12 do .....	299 00
Feversham and Lady Bank.....	J. Poole.....	5	1	12 do .....	40 00
Fingerboard and Sonya.....	T. Moase.....	2½	3	12 do .....	80 00
Foxmead and Railway Station.....	J. Hadden.....	½	6	12 do .....	40 00
Frank's Bay, North Bay and Sturgeon Falls.....	J. M. Smith.....	2	15 w, 20 s.	12 do .....	70 00
Gamebridge and Railway Station ..	W. M. Stewart.....	1½	12	12 do .....	98 00
Georgina Island and Sutton West..	C. Bigcanoe.....	8	2	12 do .....	50 00
Germania and Uffington Road.....	W. Stamp.....	2½	3	12 do .....	75 00
Gilford and Railway Station.....	J. A. Blain.....	24	12	do .....	60 00
Glandine and Railway Station.....	E. Pogue.....	2	3	12 do .....	70 00
Glenarm and Woodville.....	J. H. Pethick.....	22 r. t.	6	12 do .....	350 00
Glencairn and Railway Station.....	W. Grieve.....	½	12	12 do .....	100 00
Glen Huron and Railway Station ..	J. Hamilton.....	1½	6	12 do .....	115 00
Glen Orchard and Redwood .....	J. Nixon.....	3	1	Part of Seasons 1889-90 and 1890-91 .....	10 50
Goring and Rocklyn.....	J. Sparling.....	4	2	6 months (to Sept. 30, '90)	25 00
do do .....	T. Muxlow.....	4	2	6 do from do ..	25 00
Gravenhurst and Leg Lake.....	J. Paterson.....	11	1	12 do .....	65 00
Gravenhurst and Port Carling.....	W. Foreman.....	30	2	Part of Season 1889-90 ..	26 00
do do .....	E. R. Foreman.....	30	2	do 1890-91.....	136 00
Gravenhurst and Railway Station..	N. Ferran.....	3½	36	12 months.....	223 11
do do .....	do .....	½	6	9 do (to Dec. 31, '90) and arrears.....	34 46
Gravenhurst and Uffington.....	T. Fielding.....	11	3	3 do (to June 30, '90).	48 50
do do .....	R. Fielding.....	11	3	9 do from do ..	103 50

DETAIL of all payments for Mail Transportation in Barrie Postal Division,  
&c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Gravenhurst and Walker's Point...	W. Walker.....	14	1	Part of Seasons 1889-90 and 1890-91.....	60 00
Gravenhurst and West Gravenhurst	W. McDivitt...	2	6	12 months.....	140 00
Grenfell and Railway Station.....	H. Parr.....	2½	2	12 do.....	60 00
Guthrie and Oro Station.....	D. Livingston.....	3	2	12 do.....	48 00
Harkaway and Markdale.....	J. Logan.....	7	1	12 do.....	52 00
Hatherton and McIntyre.....	E. Scilley.....	4½	2	10 do (from June 1, '90).....	41 66
Hawkstone and Railway Station...	W. Hodges.....	4	12	12 do.....	38 00
Hillsdale and Hobart.....	K. Kennedy.....	8	3	12 do.....	184 00
Hillsdale and Wybridge, &c.....	N. McRae.....			Special trips; washout on railway.....	4 00
Hockley and Mono Centre.....	R. Colwell.....	11	6	12 months (less fine).....	366 45
Holland Landing and Ry. Station...	W. Luck.....	1½	24	12 do.....	75 12
Holt and Mount Albert.....	J. Roseman.....	3	6	12 do.....	125 00
Honeywood and Horning's Mills...	J. Ostic.....	6	6	12 do.....	198 00
Hoodstown and Huntsville.....	G. A. Hutchins.....	9	2	12 do.....	120 00
Hopeville and Swinton Park.....	J. Martin.....	4	2	12 do.....	50 00
Horning's Mills and Shelburne Station	J. Ostic.....	6	6	12 do.....	197 75
Hotham and Nipissing.....	W. W. Rodgers.....	6	1	10 do (from June 1, '90).....	33 33
Huntsville and Peninsula Lake.....	J. G. Henderson.....	10½	1	4 do (from Dec. 1, '90).....	13 33
Huntsville and Railway Station...	D. Kernaghan.....	4½	12	12 do.....	125 20
do do.....	M. Kinton.....	4	12	7 do 14 days (from Aug. 18, '90).....	77 60
Hutton House and Wharf.....	J. Hutton.....	3	3	Part of Season 1890.....	4 00
Innisfil and Stroud.....	G. Barclay.....	3	3	12 months.....	125 00
Ivy and Thornton.....	T. Brown.....	4½	6	12 do.....	119 00
Juddhaven and Port Carling.....	F. E. Judd.....	14	1	Part of Season 1889-90 and 1890-91.....	50 00
Katrine and Mail Catching Post...	J. Mawhinney.....	1½	6	12 do.....	117 50
Katrine and Orange Valley.....	R. White.....	6	1	5 do (from Nov. 1, '90).....	16 66
Katrine and Sand Lake.....	J. Hunter.....	14	1	7 do (to Oct. 31, '90).....	46 66
Kearney and Emsdale Station.....	D. Thomas.....	6	3	12 do.....	110 00
Kearney and Ravensworth.....	T. Switzel.....	7	1	9 do (to Dec. 31, '90).....	30 00
do do.....	S. M. Garrioch.....	7	1	3 do from do.....	10 00
Keldon and Shelburne.....	W. Bryon.....	9½	2	12 do.....	90 00
Kells and Powassan Station.....	H. Anderson.....	8½	1	12 do.....	60 00
Keswick and Roach's Point.....	J. Cake.....	3	6	12 do.....	115 00
Kilgorie and Whitfield.....	J. Gallagher.....	4½	2	9 do (to Dec. 31, '90).....	37 50
do do.....	J. H. Lloyd.....	4½	2	3 do from do.....	12 50
Killyleagh and Thornton.....	J. Hicks.....	3	2	12 do.....	39 75
Kilworthy and Changing Post.....	G. A. Lehmann.....	200 yds	6	12 do.....	30 00
Kilworthy and Sparrow Lake.....	A. Wiancko.....	4½	2	12 do.....	60 00
Kinmount and Railway Station.....	J. Wilson.....	1½	12	12 do.....	40 00
Kirkfield and Rohallion.....	T. Strachan.....	6	1	12 do.....	50 00
Kolapore and Ravenna.....	G. Wilson.....	5	3	12 do.....	65 00
Lafontaine and Penetanguishene...	P. Brosseur.....	8	3	12 do.....	115 00
Layton and Blackwater Station...	C. Ferguson.....	4	2	12 do.....	65 00
Leaskdale and Sunderland Station...	A. St. John.....	13	6	12 do.....	340 00
Lefroy and Railway Station.....	J. G. Douse.....	1½	12	12 do.....	31 28
Lindsay and Railway Station.....	H. Workman.....	1½	48	12 do (less fines).....	293 00
Lindsay and Street Letter Boxes...	B. Cook.....	5½	18	12 do.....	192 36
Lindsay and Sturgeon Point.....	G. Crandell.....	4	1	6 do (from Oct. 1, '90).....	75 00
Lisle and Railway Station.....	R. H. Little.....	1½	12	6 do (to Sept. 30, '90).....	25 00
do do.....		2½	24	6 do from do.....	50 00
Little Britain and Railway Station...	H. Mills.....	2	12	12 do.....	100 00
Little Britain and Valentia.....	J. Moffatt.....	5½	3	12 do.....	77 00
Longford Mills and Railway Station...	W. Thomson.....	2½	24	12 do.....	40 00
Lorimer Lake and McKellar.....	F. B. Ferris.....	8	1	12 do.....	60 00
Lorneville and Railway Station...	C. Morison.....	1	12	12 do.....	60 00

DETAIL of all payments for Mail Transportation in Barrie Postal Division,  
&c.—Continued.

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per week.	Period.	Amount.
					\$ cts.
Magnetawan and Nipissing .....	A. H. McLachlan	34	3	12 months .....	749 00
Magnetawan and Seguin Falls .....	H. Irwin	21	3	9 do (to Dec. 31, '90)	216 00
do do .....	W. Fry	21	3	3 do from do .....	75 00
Malta and Severn Bridge .....	T. White	4	2	12 do .....	75 00
Manilla and Junction .....	S. Harper	1 $\frac{1}{2}$	12	12 do .....	144 00
Maple Island and Whitestone .....	G. Montgomery	5	1	12 do .....	50 00
Meaford and Railway Station .....	M. Paul	$\frac{1}{2}$	24	12 do .....	100 00
Meaford and Walter's Falls .....	J. Murray	22 r. t.	2	12 do .....	159 00
Mecunoma and South River .....	W. Adams	15	3	9 do (to Dec. 31, '90)	216 00
do do .....	W. Gemmell	15	3	3 do from do .....	59 75
Mecunoma and Wattenwyl .....	A. Egger	3	2	12 do .....	40 00
Melancthon and Railway Station .....	J. Brown	$\frac{1}{2}$	6	12 do .....	68 64
Melissa and Mail Catching Post .....	H. Mason	$\frac{1}{2}$	6	12 do .....	24 00
Midland and Railway Station .....	T. B. J. Gladstone	$\frac{1}{2}$	24	12 do .....	120 00
Midland and Penetanguishene Station .....	J. Smith	5	6	12 do .....	123 36
do do .....	J. Dubeau			Special trips .....	7 75
Millington and Uptergrove Station .....	A. P. McDonald	3	3	12 months .....	74 00
Minden and Gelert Station .....	D. J. Hartle	7 $\frac{1}{2}$	12	12 do .....	300 48
Minesing and Russellton .....	W. H. Sissons	6	3	12 do .....	115 00
Minesing and Railway Station .....	J. Young	2	6	12 do .....	84 51
Mono Centre and Orangeville .....	T. Sanderson	11	6	3 do (to June 30, '90)	142 13
do do .....	M. Sanderson	11	6	9 do from do .....	426 38
Mortimer's Point and Port Carling .....	W. Mortimer	$\frac{1}{2}$	12	Part of Season 1889-90 and 1890-91 .....	20 00
Mount Albert and Railway Station .....	J. Roseman	$\frac{1}{2}$	12	12 months .....	74 00
Mount Horeb and Reaboro' .....	W. Elliot	5	3	12 do .....	100 00
Muskoka Mills and Penetanguishene .....	A. H. Campbell	20	1	12 do .....	208 00
Nantyle and Mail Catching Post .....	S. Spillett	3 $\frac{3}{4}$	6	12 do .....	40 00
Newholm and Port Sydney .....	D. Ferguson	6	1	12 do .....	35 00
New Lowell and Railway Station .....	R. Paton	$\frac{1}{2}$	12	12 do .....	24 00
Newmarket and Sutton West .....	C. Newburn	22	6	12 do .....	892 00
Nipissing and Powassan Station .....	H. A. Steele	12	3	12 do .....	230 00
Nottawa and Pretty River Valley .....	M. Gillis	6	2	6 do (to Sept. 30, '90)	30 00
Nottawa and Rob Roy .....	T. Stephens	10	2	6 do from do .....	44 50
Nottawa and Railway Station .....	G. Gemmell	3 $\frac{1}{2}$	12	12 do .....	88 00
Novar and Railway Station .....	R. W. Nicholls	$\frac{1}{2}$	12	12 do .....	82 10
Novar and Swindon .....	J. Large	5	2	12 do .....	52 00
Oakwood and Railway Station .....	W. H. McLachlan	1 $\frac{1}{2}$	12	12 do .....	93 60
Omemee and Railway Station .....	R. Grandy	1 $\frac{1}{2}$	24	12 do .....	250 00
Oranmore and Spence .....	H. Nelson	5	2	12 do .....	80 00
Orillia and Railway Station .....	W. Jackson	$\frac{1}{2}$	24	12 do .....	184 67
do do .....	A. Fraser	$\frac{1}{2}$	24	12 do (less fines) .....	121 70
Orillia and Sebright .....	R. R. Young	16	6	12 do .....	374 00
Oro Station and Railway Station .....	A. Douglas	$\frac{1}{2}$	6	12 do .....	55 00
Parkersville and Changing Post .....	T. H. Osborne	50 rds.	6	12 do .....	25 00
Parry Sound and Rosseau .....	T. W. Quinn	24	6	12 do (less fine) .....	489 00
Parry Sound and Shebashekong .....	W. R. Hamilton	14	1	12 do .....	80 00
Pearceley and Sundridge .....	T. G. Pearce	8	1	12 do .....	65 00
Penetanguishene and Railway Station .....	C. Charlebois	$\frac{1}{2}$	12	12 do .....	59 00
Penville and Tottenham .....	W. Armstrong	19 r. t.	6	12 do .....	269 00
Pern and Rosemont .....	W. Arnold	8	6	12 do (less fine) .....	259 00
Phelpston and Railway Station .....	D. Gallagher	1 $\frac{1}{2}$	6	12 do .....	46 95
Port Cockburn and Trout Lake .....	H. Fraser	4	2	Part seasons '89-90 & '90-91 .....	25 00
Port Perry and Scugog .....	J. Burke	7	2	3 months (to June 30, '90) .....	25 00
do do .....	A. Earle	7	2	9 do from do .....	75 00
Port Severn and Waubashene .....	J. Hanly	5	3	12 do .....	156 00
Port Sydney and Utterson .....	H. G. Ladell	2 $\frac{1}{2}$	6	12 do .....	156 48



DETAIL of all payments for Mail Transportation in Barrie Postal Division  
&c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per week.	Period.	Amount.
					8 cts.
Powassan Station and Railway Station.	J. G. Duncan.	$\frac{1}{4}$	6	12 months	46 95
Powles Corners and Halls Crossing.	W. H. Powles.	1	6	1 do (from Mar. 1, '91)	5 83
Primrose and Whitfield.	P. D. Henry.	$4\frac{1}{2}$	6	12 do	156 00
Proton Station and Railway Station.	F. Freeman.	$\frac{1}{2}$	6	12 do	50 00
Purbrook and Uffington.	J. Crockford.	6	2	12 do	50 00
Rama and Longford Station.	J. McPherson.	$1\frac{1}{4}$	6	12 do	80 00
Ravenshoe and Railway Station.	W. D. Smith.	4	6	12 do	150 00
Reaboro' and Railway Station.	J. Greer.	$\frac{1}{4}$	12	12 do	70 00
Redickville and Singhampton.	J. Richards.	10	3	5 do (to Aug. 31, '90).	81 25
Riverview and Railway Station.	H. Jordan.	$3\frac{1}{2}$	2	12 do	62 40
Rob Roy and Singhampton.	R. Shields.	6	2	6 do (to Sept. 30, '90)	42 00
Rosemont and Shelburne.	G. Barber.	12	6	12 do	520 00
Rosseau and Rosseau Falls.	P. Mutchener.	4	3	Part seasons '89-90 & '90-91	40 00
Rosseau and Shannonhall.	W. Fletcher.	$12\frac{1}{2}$	1	12 months	78 00
Rosseau and Stanley House.	W. B. Maclean.	8	1	4 do (from Dec. 1, '90)	15 00
Rosseau and Uttersen.	J. Cook.	22	6	Part of season '89-90.	30 33
do do	N. Hanes.	22	6	Part of season '90-91.	147 63
St. Patrick and Changing Post.	J. Langdon.	$\frac{1}{2}$	3	12 months	38 00
Sadowa and Sebright.	J. H. Vanvlack.	$5\frac{1}{2}$	1	12 do	31 20
Saurin and Railway Station.	D. A. Cooper.	$\frac{1}{2}$	12	12 do	20 00
Scotia and Mail Catching Post.	A. L. Dafee.	$\frac{1}{2}$	6	12 do	62 60
Seyn Bridge and Railway Station.	J. H. Jackson.	$\frac{1}{2}$	24	12 do	120 00
Shanty Bay and Railway Station.	J. Graham.	$\frac{1}{2}$	12	12 do	60 00
Shelburne and Railway Station.	E. Berwick.	$\frac{1}{2}$	24	12 do	125 20
Smithdale and Railway Station.	C. Smith.	$\frac{1}{2}$	12	12 do	30 00
Sonya and Railway Station.	A. Black.	$\frac{1}{2}$	6	12 do	40 00
South River and Railway Station.	W. Holditch.	$\frac{1}{2}$	12	12 do (less fine).	155 00
Stanleydale and Yearleys.	J. Boulter.	2	3	12 do	39 00
Stayner and Railway Station.	E. R. Sanders.	$\frac{1}{2}$	24	12 do	96 00
Stayner and Sunnidale.	J. Sherrick.	7	3	12 do	123 51
Stroud and Craigvale Station.	R. G. McCraw.	1	12	12 do	120 00
Sturgeon Bay and Railway Station.	J. Playfair.	$\frac{1}{2}$	12	12 do	80 00
Sunderland and Railway Station.	N. Steffins.	$\frac{1}{2}$	24	12 do	59 50
Sundridge and Railway Station.	J. Carter.	$\frac{1}{2}$	12	12 do	93 90
Sundridge and Vavasour.	M. Colville.	10	1	12 do	64 00
Sutton West and Railway Station.	W. D. Townley.	$\frac{1}{2}$	12	12 do	100 00
Sutton West and Vachell.	do	14 r. t.	2	12 do	120 00
Thompsonville and Railway Station.	J. T. Schmieten-	$\frac{1}{2}$	12	12 do	110 00
Thornton and Railway Station.	R. Power.	$\frac{1}{2}$	12	6 do (to Sept. 30, '90).	29 74
do do	do	$\frac{1}{2}$	24	3 do (to Dec. 31, '90).	29 75
do do	H. Power.	$\frac{1}{2}$	24	3 do from do	29 75
Tioga and Railway Station.	G. Fitzsimmons.	$\frac{1}{2}$	12	3 do (to June 30, '90).	11 25
do do	B. Collins.	$\frac{1}{2}$	12	6 do (to Dec. 31, '90).	22 50
do do	G. Fitzsimmons.	$\frac{1}{2}$	12	3 do from do	11 25
Tottenham and Railway Station.	M. J. Casserly.	$\frac{1}{2}$	12	6 do (to Sept. 30, '90).	34 50
do do	do	$\frac{1}{2}$	24	6 do from do	65 30
Trout Creek and Railway Station.	M. Corkery.	$\frac{1}{2}$	6	5 do (from Nov. 1, '90)	20 84
Uffington and Vankoughnet.	J. Meyers.	9	2	12 do	40 00
Uthoff and Railway Station.	J. Lynes.	$\frac{1}{2}$	12	12 do	80 00
Uphill and Victoria Road.	G. Sharp.	12	3	9 do (to Dec. 31, '90).	120 00
do do	J. Gilmour.	12	3	3 do from do	56 25
Uptergrove and Railway Station.	T. Mulvihill.	$\frac{1}{2}$	24	12 do	180 00
Utopia and Station.	P. Connor.	$\frac{1}{2}$	12	12 do	50 00
Uttersen and Railway Station.	E. Hanes.	$\frac{1}{2}$	12	12 do	125 20
Uttersen and Windermere.	N. Hanes.	15	2	12 do	200 00
Vasey and Waverley.	J. Loney.	4	3	12 do	89 00

DETAIL of all payments for Mail Transportation in Barrie Postal Division,  
&c.—*Concluded.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Victoria Harbour and Railway Station .....	M. Vasey. ....	$\frac{1}{4}$	24	12 months .....	125 00
Vine and Railway Station.....	V. P. Kelcey....	$\frac{1}{6}$	12	12 do .....	56 00
Wareham and Proton Station.....	J. M. Burk.....	7	3	12 do .....	140 00
Washago and Railway Station.....	J. C. Marshall..	$\frac{1}{2}$	24	12 do .....	156 00
Waubashene and Railway Station..	W. H. Russell..	$\frac{1}{2}$	24	12 do .....	60 00
Waverley and Railway Station.....	T. French .....	9	6	12 do .....	275 00
Woodville and Railway Station .....	H. Ferguson....	$\frac{1}{2}$	24	12 do .....	100 00
Wyebridge and Wyevale Station.....	N. McRae.....	5	6	12 do .....	134 00
Wyevale and Railway Station.....	W. T. Stewart..	$\frac{1}{6}$	6	12 do .....	30 00
Zephyr and Railway Station.....	J. N. Dafoe.....	3	6	12 do .....	160 00
				Total .....	\$ 45,909 79

WILLIAM WHITE,  
*Deputy Postmaster-General.*

W. H. SMITHSON,  
*Accountant.*

## BRITISH COLUMBIA POSTAL DIVISION.

DETAIL of all payments for Mail Transportation in British Columbia Postal Division, made within the Year ended 30th June, 1891.

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Agassiz and Railway Station.....	L. A. Agassiz....	$\frac{3}{4}$	12	12 months.....	60 00
Ainsworth and Marcus, U.S. ....	W. J. Wilson....	140	1	18 trips.....	900 00
Alberni and Sayward Alberni.....	C. Taylor.....	2	2	12 months.....	50 00
Aldergrove and Mount Lehman....	T. H. Lehman....	9	1	12 do.....	97 00
Alkali Lake and Clinton.....	J. S. Place.....	95	1	12 do.....	1,200 00
Anthracite and Railway Station....	A. Morgan.....	$\frac{1}{16}$	12	9 do (to Dec. 31, '90).	75 00
do do.....	S. Carrick.....	200 yds	12	3 do from do.....	25 00
Ashcroft and Ashcroft Station....	H. P. Cornwall..	2	2	12 do.....	75 00
Ashcroft Station, Clinton, Barker- ville and Lillooet.....	B. C. Express Co	32, 250 & 47	3 & 1	12 do.....	23,541 66
Ashcroft Station and Railway Sta- tion.....	W. B. V. Bailey	200 yds	12	12 do.....	180 00
Banff and Railway Station.....	R. G. Brett.....	$2\frac{1}{2}$	12	12 do.....	260 00
Barkerville and Quesnelle Forks....	F. Littler.....	50' ftn'y	12	12 do.....	700 00
Beaver and Railway Station.....	W. G. Neilson..	200 yds	12	13 do (from Mar. 1, '90)	65 00
Beaver Creek, French Creek and and Parksville.....	N. Parks.....		2	do 25 dys. (to Mar. 18, '91).	39 00
Beaver Creek and Sayward Alberni	W. Armstrong..	6	2	9 do (from July 1, '90)	52 50
Beaver Point and Burgoyne Bay....	A. McLennan....	10	1	12 do.....	150 00
Burgoyne Bay and Wharf.....	S. Maxwell.....	$\frac{1}{2}$ as req.	12	do.....	50 00
Burrard Inlet and Railway Station.	G. Black.....	200 yds	12	12 do.....	60 00
Canmore and Railway Station.....	J. Chenier.....	$\frac{1}{8}$	12	12 do.....	60 00
Cedar and Nanaimo.....	J. Hill.....	10	1	12 do.....	80 00
Chenainus and Railway Station....	H. Hague.....	$\frac{1}{2}$	12	9 do (to Dec. 31, '90).	90 00
do do.....	E. J. Palmer....	$\frac{1}{2}$	12	3 do from do.....	30 00
Chilliwack and Railway Station....	J. F. Harrison..	$6\frac{1}{2}$	5	12 do.....	691 65
Chilliwack and Sardis.....	A. S. Vedder....	3	3	12 do.....	100 00
Chilliwack and Sumas.....	W. McGillivray.	6	5	12 do.....	261 00
Clayoquot and Sayward Alberni	J. L. Penney....	65	ftly & mthly	12 do.....	225 00
Cobble Hill and Railway Station....	H. T. Porter....	40 yds	6	12 do.....	24 00
Cochrane and Mitford.....	D. W. Crowley..	3	6	2 do (to May 31, '90).	20 00
do do.....	do.....	3	12	10 do from do.....	180 00
Cochrane and Railway Station.....	J. Johnson.....	$\frac{1}{4}$	12	12 do.....	240 00
Comox and Grantham.....	W. C. Smith....	7	1	12 do.....	100 00
Comox and Wharf.....	S. Creech.....	$\frac{1}{2}$	2	12 do.....	50 00
Corfield and Railway Station.....	G. T. Corfield..	$1\frac{1}{2}$	6	12 do.....	180 00
Cowichan and Genoa.....	W. B. Baker....	$2\frac{1}{2}$	3	5 do (from Nov. 1, '90)	50 00
Cowichan and Railway Station....	G. B. Ordano....	2	3	12 do.....	120 00
Cowichan Lake and Duncan's Sta- tion.....	A. C. Fraser....	20	1	3 do (from Jan. 1, '91)	37 50
Cranbrook and Golden.....	F. P. Armstrong	200	ftly & mthly	12 do.....	990 00
Dog Creek and Empire Valley.....	T. Boyle.....	18	1	12 do.....	250 00
Donald and Railway Station.....	G. H. Preswell..	$\frac{1}{2}$	12	3 do (to June 30, '90)..	60 00
do do.....	R. W. Patmore..	$\frac{1}{2}$	12	9 do from do.....	90 00
Douglas Lake and Quilchena.....	J. B. Greaves....	22	1	12 do.....	150 00
Duck and Pringle and Grand Prairie	W. H. Jones....	18	1	12 do.....	129 00
Duck and Pringle and Railway Sta- tion.....	O. S. Batchelor..	300 yds	6	12 do.....	60 00
Duncan's Station and Railway Sta- tion.....	J. Macdonald....	200 yds	6	12 do.....	60 00
Duncan's Station and Sutton Green	A. Fraser.....	20	1	6 do (to Dec. 31, '90).	75 00
East Sooke and Main Post Road....	J. H. Dales.....	10	2	12 do.....	160 00
East Wellington and Nanaimo.....	W. S. Chandler..	3	6	12 do.....	180 00



DETAIL of all payments for Mail Transportation in British Columbia Postal Division, &c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Elgin and New Westminster.....	B. Stevenson.....	12	2	12 months.....	290 00
Emory and Yale.....	K. Geisler.....	5	1	1 do (to Apr. 30, '90).....	4 16
Esquimalt and Victoria.....	C. J. King.....	4	24	12 do.....	300 00
Field and Railway Station....	H. G. Parson.....	120 yds	12	12 do.....	60 00
French Creek and Mail Steamer....	H. Lee.....			4 trips.....	6 00
Fry and Kootenai Station.....	S. W. Smith.....			3 do.....	15 00
Gabriola Island and Wharf.....	J. Gray.....	23	2	12 months.....	60 00
Golden and Railway Station.....	C. A. Warren.....	400 yds	12	12 do.....	120 00
Goldstream and Railway Station....	J. Phair.....	6	6	12 do.....	120 00
Granite Creek and Lower Nicola....	W. T. Thompson.....	65	12	12 do.....	240 00
Granite Creek and Princeton.....	do.....	12	12	12 do.....	60 00
Hall's Prairie and New Westminster	H. T. Thrift.....	23	1	12 do.....	275 00
Hanceville and Soda Creek.....	R. Graham.....	75	ftly & mthly	12 do.....	600 00
Harrison Hot Springs and Railway Station.....	L. A. Agassiz.....	5	6	2 do (to May 31, '90).....	40 00
do do.....	J. R. Brown.....	5	6 & 12	10 do from do.....	158 33
Harrison River and Railway Station	C. W. Menten.....	1/2	4	12 do.....	60 00
Hatzic Prairie and Matsqui.....	T. Thompson.....	6	2	12 do.....	100 00
Hope and Railway Station.....	J. Wardle.....	2	6	12 do.....	156 50
Illicillewaet and Railway Station...	W. T. Atherton.....	1/8	12	12 do.....	40 00
Johnson's Landing and Mail Catching Post.....	A. W. Presley.....	30 yds	6	9 do (to Dec. 31, '90).....	37 50
do do.....	A. W. McIntosh.....	30 yds	6	3 do from do.....	12 50
Johnson's Landing and Nicomin....	W. Brown.....	5	2	5 do (from Nov. 1, '90).....	31 25
Kamloops and Railway Station....	E. H. Jones.....	1	12	12 do.....	365 00
Kamloops and Spence's Bridge.....	J. Clark.....	100	1	12 do.....	1,800 00
Kananaskis and Catching Post.....	J. A. Walker.....	100 yds	12	12 do.....	45 00
Koksilah and Railway Station.....	C. Crosier.....	30 yds	6	12 do.....	40 00
Langley and Langley Prairie.....	H. Davidson.....	6	2	12 do.....	150 00
Langley and Railway Station.....	O. J. J. Wilkie.....	3	5	12 do.....	350 00
Lytton and Railway Station.....	A. Stevenson.....	3 1/2	12	12 do.....	120 00
McPherson Station and Railway Station.....	G. Jones.....	70 yds	6	12 do.....	40 00
Maple Bay and Railway Station.....	J. Kier.....	6	3	12 do.....	180 00
Matsqui and Mount Lehman.....	T. H. Lehman.....	5	3	12 do.....	220 00
Matsqui and Railway Station.....	J. Tretheway.....	1/4	12	12 do.....	180 00
Metochosin and Victoria.....	J. Parker.....	25 1/4	1	12 do.....	250 00
Millward and Railway Station.....	J. McDougall.....	3	2	12 do.....	100 00
Morley and Railway Station.....	R. Scott.....	100 yds	12	12 do.....	40 00
Mount Lehman and Upper Sumas....	H. Johnson.....	14	1	11 do (from May 1, '90).....	115 20
Nanaimo and Nanoose Bay.....	J. Knight.....			Special trips.....	72 00
Nanaimo and Railway Station.....	J. Ganner.....	4	24	12 months.....	300 00
Nanaimo and Sayward Alberni....	W. Armstrong.....	54	1	12 do.....	619 00
Nanaimo and Wharf.....	W. Rogers.....	300 yds	6	1 do 11 days (to Aug. 11, '90).....	13 50
do do (Comox str.).....	A. H. Horne.....	100 yds	2	8 do 9 days (from July 23, '90).....	34 51
do do (Vancouver str.).....	A. P. W. Goldsmith.....	300 yds	6	7 do (from Sept. 1, '90).....	70 00
Nelson and Sproat.....	J. Wilson.....	28	1	7 do 8 days (to Dec. 8, '90).....	670 00
New Westminster and Ry. Station.	W. Smith.....	1/4	16	12 do.....	333 40
New Westminster and Street Letter Boxes.....	W. G. Cross.....	4	6	3 do (from Jan. 1, '91).....	73 50
North Bend and Railway Station...	H. Fink.....	100 yds	6	12 do.....	24 00
Northfield and Railway Station...	A. Clarkson.....	5	6	5 do (from Nov. 1, '90).....	83 33

DETAIL of all payments for Mail Transportation in British Columbia Postal Division, &c.—*Concluded.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					8 cts.
North Saanich and Victoria. ....	H. Simpson. ....	24	2	12 months .....	445 00
Okanagon Mission and Osoyoos ....	J. Brent. ....	85	m't'ly	12 do .....	414 00
Okanagon Mission, Sicamous and Vernon .....	P. Ellison. ....	90 & 56	2 & 1	12 do .....	600 00
Osoyoos and Rock Creek. ....	J. Brent. ....	27	m't'ly	12 do .....	240 00
Otter Point and Victoria. ....	Gordon & Floyer	30	1	12 do .....	280 00
Plumper Pass and Mail Steamer ...	W. T. Collinson.	400 yds	4	7 do (from Sept. 1, '90)	58 33
Port Hammond and Railway Station	W. J. Harris ...	100 yds	12	3 do (to June 30, '90).	15 00
do do	A. L. Lazenby. ...	100 yds	12	9 do from do	45 00
Port Haney and Railway Station...	D. Dockstader. ...	50 yds	12	12 do .....	60 00
Port Moody and Mail Catching Post	J. Tays. ....	$\frac{1}{2}$	12	12 do .....	60 00
Quadra and Wharf .....	R. T. Swan. ....	$\frac{1}{3}$	1	12 do .....	32 00
Quamichan and Railway Station ...	W. P. Jaynes. ...	$1\frac{2}{3}$	6	12 do .....	180 00
Revelstoke and Railway Station...	J. Liberty. ....	2	12	12 do .....	365 00
Revelstoke and Wharf. ....	do	1	As req	Season, 1890	57 00
Roger's Pass and Railway Station...	J. M. Carroll. ...	150 yds	6	12 months .....	60 00
Salmon Arm and Railway Station...	C. A. Maguire. ...	300 yds	12	5 do (from Nov. 1, '90)	25 00
Salt Spring Island and Wharf. ....	J. Broadwell. ...	3	As req	12 do .....	150 00
Savona's Ferry and Railway Station	J. H. Macnab. ...	30 yds	12	12 do .....	40 00
Sea Island and Vancouver. ....	H. C. Magee. ....	10	3	12 do .....	240 00
Shuswap and Railway Station. ....	A. M. Bryan. ....	200 yds	6	12 do .....	60 00
Sicamous and Railway Station. ....	S. Appleby. ....	400 yds	12	12 do .....	180 00
Somenos and Railway Station. ....	J. Kier. ....	$1\frac{1}{2}$	6	12 do .....	180 00
Spence's Bridge and Railway Station	J. Murray. ....	$\frac{3}{4}$	12	12 do .....	100 00
Sproat and Wharf. ....	T. A. Sproat. ....	100 yds	As req	Season, 1890	49 00
Sumas and Upper Sumas. ....	E. T. Hall. ....	14	1	1 month (to April 30, '90)	10 40
Union and Wharf. ....	Union Colliery Co. (Ld.). ....	12	1	12 do .....	240 00
Vancouver and Railway Station ...	H. A. Berry. ....	$\frac{1}{3}$	12	12 do .....	365 00
do do	O. Burritt. ....	$\frac{1}{3}$	9	12 do .....	120 00
Vancouver and Street Letter Boxes	do	6	7	12 do .....	136 87
Vancouver and Wharf. ....	W. Rogers. ....	$\frac{1}{3}$	6	1 do 11 days (to Aug. 11, '90).	13 50
do do	A. P. W. Goldsmid. ....	$\frac{1}{3}$	6	7 do (from Sept. 1, '90)	35 00
do do	H. A. Berry. ....	$\frac{1}{3}$	12	12 do .....	184 00
Vancouver Ry. Station and Wharf.	J. W. Moore. ....	50 yds	5	12 do .....	51 25
Vernon and White Valley. ....	C. Christian. ....	15	1	12 do .....	187 00
Victoria and Railway Station. ....	W. G. Bowman. ...	$\frac{1}{3}$	12	12 do .....	313 00
Victoria and Street Letter Boxes...	J. Smith. ....	6	12	12 do .....	500 00
Victoria and Wharf. ....	Victoria Transfer Co. ....	$\frac{3}{4}$	12	12 do (and special trips)	361 50
Wellington and Railway Station...	E. W. Bickle. ....	$\frac{1}{4}$	12	6 do (to Sept. 30, '90).	36 00
do do	J. Carstairs. ....	$\frac{1}{4}$	12	6 do from do	36 00
Westholme and Railway Station ...	E. Barkley. ....	$\frac{1}{4}$	3	4 do (from Dec. 1, '90)	13 33
Whonnock and Railway Station ...	G. A. Smith. ....	$\frac{1}{4}$	12	12 do .....	60 00
Yale and Railway Station. ....	J. W. Lowes. ....	100 yds	12	12 do .....	60 00
Total. ....					\$48,047 17

WILLIAM WHITE,  
Deputy Postmaster-General.

W. H. SMITHSON,  
Accountant.

## KINGSTON POSTAL DIVISION.

DETAIL of all payments for Mail Transportation in Kingston Postal Division,  
made within the Year ended 30th June, 1891.

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Addison and Bell's Station.....	H. S. Moffatt...	8 $\frac{1}{2}$	6	12 months .....	200 00
Adolphustown and Bath.....	J. Horner .....	14	6	12 do .....	359 80
Adolphustown and Napanee.....	E. Gallagher.....	25	6	12 do .....	585 00
Albert and Marysville.....	P. Sullivan.....	10	3	5 do (to Aug. 31, '90).....	75 00
do do .....	do .....	10	6	7 do from do .....	175 00
Albury and Rednersville.....	G. Rose .....	4	3	12 do .....	75 00
Alderville and Franklin's Corners.....	W. Stevenson.....	48 rods	6	12 do .....	25 00
Allisonville and Consecon.....	G. Pine .....	8	3	12 do .....	125 00
Allsaw and Minden.....	R. McKnight.....	10	2	12 do .....	120 00
Ameliasburg and Belleville.....	G. W. Tice.....	10	6	12 do .....	400 00
Anson and Railway Station.....	A. McMullen.....	50 yds.	6	12 do .....	25 00
Apsley and Cheddar.....	A. Graham.....	21	1	12 do .....	175 00
Apsley and Lasswade.....	T. Eastland.....	11	1	3 do (to June 30, '90).....	13 00
Apsley and Peterboro'.....	P. Kennedy.....	40	3	12 do .....	500 00
Arden and Dead Creek.....	J. Arney.....	7	1	9 do (from July 1, '90).....	30 00
Arden and Railway Station.....	J. Babcock.....	1	6	12 do .....	75 00
Arden and Tamworth.....	do .....	20 $\frac{1}{2}$	3	12 do .....	190 00
Athens and Mallorytown.....	S. L. Hogeboom.....	13 $\frac{1}{2}$	6	12 do .....	480 00
Athens and Oak Leaf.....	W. S. Johnson.....	9	3	12 do .....	149 48
Athens and Plum Hollow.....	V. W. O. Sherman.....	6	2	12 do .....	58 00
Ballantyne's Station and Railway Station.....	J. Hysop.....	$\frac{1}{2}$	2	12 do .....	26 00
Bancroft and Cheddar.....	B. H. Sweet.....	21	1	9 do (to Dec. 31, '90).....	93 75
do do .....	J. Derry.....	21	1	3 do from do .....	26 00
Bancroft and Wood.....	J. McLellan.....	11	1	12 do .....	50 00
Bannockburn and Railway Station.....	S. McEwen.....	$\frac{1}{2}$	12	12 do .....	60 00
Barriefield and Kingston.....	J. Ryan.....	1 $\frac{1}{2}$	6	12 do .....	75 00
Bath and Ernestown Station.....	C. Mills.....	3 $\frac{1}{2}$	12	12 do .....	140 00
Bath and Stella.....	A. Stevenson.....	6 $\frac{1}{2}$	6	12 do (less fine).....	353 11
Battersea and Kingston.....	A. Ferguson.....	16	3	6 do (to Sept. 30, '90).....	69 74
do do .....	W. J. Arthur.....	16	6	6 do from do .....	139 74
Bayside and Belleville.....	A. Aselstine.....	7	3	12 do .....	50 00
Bedford Mills and Newboro'.....	J. Woodman.....	6	3	12 do .....	70 00
Belleville and Albert College.....	H. W. Cronk.....	1 $\frac{3}{4}$	6	8 do (to Nov. 30, '90).....	16 66
Belleville and Belleville Station.....	do .....	1 $\frac{1}{4}$	12	12 do .....	75 00
Belleville and Madoc.....	W. Wooley.....	27	6	12 do .....	460 00
Belleville and Railway Station.....	H. W. Cronk.....	1 $\frac{1}{4}$	24	12 do .....	313 00
Belleville and Sidney Crossing.....	W. Vandervoort.....	6 $\frac{1}{2}$	2	5 do (to Aug. 31, '90).....	33 33
do do .....	W. R. Vander-voort.....	6 $\frac{1}{2}$	3	7 do from do .....	61 25
Belleville and Street Letter Boxes.....	H. W. Cronk.....	5	12	12 do .....	250 00
Belleville and Tweed.....	J. Campbell.....	25	6	12 do .....	666 68
Belleville and Wallbridge.....	F. B. Prior.....	9	3	12 do .....	110 00
Bellrock and Verona.....	F. Clark.....	4	6	12 do .....	120 00
Bensforth and South Monaghan.....	E. Stirton.....	5	3	12 do .....	75 00
Bethel and The Corners.....	R. H. Robinson.....	$\frac{1}{4}$	6	12 do .....	40 00
Bewdley and Millbrook.....	H. Atkins.....	11	6	12 do .....	350 00
Birdsalls and Railway Station.....	J. Lancaster.....	1	6	3 do (to June 30, '90).....	1 00
do do .....	R. E. Birdsall.....	1	6	9 do from do .....	30 00
Bird's Creek and New Carlow.....	J. Carmichael.....	15	1	12 do .....	100 00
Black River Bridge and Picton.....	G. McGuire.....	7 $\frac{1}{2}$	3	12 do .....	98 00
Blairhampton and Minden.....	W. Blair.....	10	1	12 do .....	52 00
Blairton and Havelock.....	M. J. Peters.....	8	3	12 do .....	141 68
Blairton and Wariston.....	J. A. Allen.....	9	2	12 do .....	100 00
Bloomfield and Railway Station.....	A. B. Saylor.....	$\frac{1}{4}$	12	12 do .....	75 12
Bobcaygeon and Peterboro'.....	W. H. Bottum.....	22	6	12 do .....	700 00
Boskung and Minden.....	J. Beatty.....	14	1	12 do .....	65 00
Boulter and Combermere.....	J. Lynch.....	18	3	12 do .....	300 00
Boulter and L'Amable.....	E. T. Lumb.....	22 $\frac{1}{4}$	3	6 do (to Sept. 30, '90).....	151 00
do do .....	A. Stewart.....	20	3	6 do from do .....	137 50



DETAIL of all payments for Mail Transportation in Kingston Postal Division,  
&c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Brighton and Campbellford.....	J. A. Robinson.....	20	6 12 do	.....	480 00
Brighton and Smithfield.....	O. Davies.....	5½	6 12 do	.....	175 00
Brockville and Sherwood Springs...	W. Kilmury.....	8	1 12 do	.....	40 00
Brockville and Westport.....	R. W. & J. Cope- land.....	44½	6 12 do	.....	2,005 00
Bronson and L'Amable.....	G. Payne.....	4	3 6 do	(from Oct. 1, '90).	45 00
Burnbrae and Railway Station.....	A. T. Donald.....	5	6 9 do	(to Dec. 31, '90).	119 25
do do.....	W. B. Ketcheson.....	5	6 3 do	from do	35 00
Burnbrae and Stanwood.....	C. Lawrence.....	11½	2 12 do	.....	84 48
Burnley and Castleton.....	E. Richardson.....	8	3 12 do	.....	108 00
Campbellford and Godolphin.....	C. Aggett.....	5	2 12 do	.....	68 00
Campbellford and Railway Station	Mulhearn & Lo- gan.....	½	12 6 do	(to Sept. 30, '90).	47 10
do do.....	Mulhearn & Drennan.....	½	12 6 do	from do	46 80
Centreton and Grafton.....	W. Roberts.....	13½	3 12 do	.....	161 00
Centreville and Tamworth.....	S. Fleming.....	8	6 12 do	.....	207 00
Chaffey Locks and Elgin.....	M. Doyle.....	6	2 12 do	.....	100 00
Chandos and Coe Hill Mines.....	R. H. Wadding- ton.....	17	1 12 do	.....	100 00
Chantry and Philipville.....	W. Elliot.....	5½	6 12 do	.....	150 00
Chapman and Lost Channel.....	A. Fluke.....	2	3 12 do	.....	52 00
Chatterton and Foxboro'.....	E. Mott.....	3½	2 3 do	(to June 30, '90).	15 00
do do.....	S. P. Morden.....	3½	2 9 do	from do	45 00
Cheddar and Gooderham.....	W. M. Patterson.....	19	1 6 do	(to Sept. 30, '90).	75 00
do do.....	A. Southworth.....	19	1 6 do	from do	75 00
Cherry Valley and Point Petre.....	A. Gibson.....	6	1 12 do	.....	37 00
Cherry Valley and Salmon Point...	J. M. Bently.....	6	2 12 do	.....	44 48
Clairview and Erinsville.....	R. T. McDonnell.....	4	2 12 do	.....	60 00
Cloyne and Denbigh.....	J. Flake.....	28	2 10 do	14 dys. (to Feb. 14, '91).	358 75
do do.....	J. Quackenbush.....	28	2 1 do	14 dys. from do	51 25
Cloyne and Harlowe.....	A. M. Campbell.....	13	2 12 do	.....	125 00
Cloyne and Railway Station.....	G. Deline.....	13½	6 12 do	(less fine).....	468 00
Cobourg and Harwood.....	T. O'Neill.....	16	6 12 do	.....	400 00
Cobourg and Rosemeath.....	T. McCutcheon.....	20	6 12 do	.....	595 00
Cobourg and Street Letter Boxes...	W. Sykes.....	3	12 12 do	.....	200 00
Coe Hill Mines and Railway Station	R. H. Wadding- ton.....	½	12 12 do	.....	50 00
Coe Hill Mines and Faraday.....	G. Orr.....	8	1 9 do	(to Dec. 31, '90).	30 00
do do.....	W. Neal.....	8	1 3 do	from do	10 00
Coe Hill Mines and The Ridge.....	R. H. Wadding- ton.....	27½ r.t.	1 12 do	.....	100 00
Colborne and Dundonald.....	G. Goodrich.....	7	6 12 do	.....	135 00
Colborne and Lakeport.....	E. Redfearn.....	2½	12 12 do	.....	175 00
Colborne and Warkworth.....	C. Richards.....	16	6 6 do	(to Sept. 30, '90).	200 00
do do.....	H. Wolfrain.....	16	6 6 do	from do	200 00
Collin's Bay and Railway Station...	J. J. Losce.....	16	12 12 do	.....	42 00
Combermere and Maynooth.....	J. Poff.....	25	1 12 do	.....	190 00
Consecon and Railway Station.....	J. G. German.....	11	3 12 do	.....	68 00
Cooper and Madoc.....	J. Best.....	11	3 12 do	.....	195 00
Cooper and the Flats.....	W. Golway.....	5	2 12 do	.....	70 00
Cottesloe and Norwood.....	C. Griffin.....	8½	2 1 do	(to April 30, '90).	5 00
do do.....	A. Kidd.....	8½	2 11 do	from do	62 33
Cranworth and Portland.....	R. Hart.....	5½	1 9 do	(to Dec. 31, '90).	18 75
do do.....	T. Hart.....	5½	1 3 do	from do	6 25
Cressy and Pictou.....	C. Storms.....	19	3 12 do	.....	300 00
Crofton and Rossmore.....	J. Belnap.....	9	6 12 do	.....	275 00
D'Arcy and Howe Island.....	C. Sughrue.....	6	2 12 do	.....	60 00
Deloro and Railway Station.....	M. O'Connor.....	1½	6 12 do	.....	96 00
Demorestville and Fish Lake.....	W. Baker.....	4	2 12 do	.....	49 48
Denbigh and Griffith.....	W. H. Blakley.....	12	1 12 do	.....	62 00

DETAIL of all payments for Mail Transportation in Kingston Postal Division,  
&c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Denbigh and Plevna. . . . .	P. & G. Stein (legal rep.) . . . . .	28	2	10 months 14 dys. (to Feb. 14, '91) . . . . .	218 75
do do . . . . .	J. Quackenbush. . . . .	23	2	1 do 14 dys. from do . . . . .	31 25
Desert Lake and Sydenham. . . . .	W. Snook . . . . .	11	1	12 do . . . . .	69 00
Dufferin and Kingston Mills. . . . .	S. Donaldson. . . . .	3½	3	12 do . . . . .	40 00
Egan Creek and L'Amable. . . . .	J. A. Smith . . . . .	6	2	6 do (to Sept. 30, '90) . . . . .	26 00
Eldorado and Empey . . . . .	L. Empey . . . . .	3	1	12 do . . . . .	30 00
Ellisville and Seely's Bay . . . . .	J. MacMillan, jr. . . . .	5	2	12 do . . . . .	55 00
Enterprise and Trafford . . . . .	M. Whelan . . . . .	9	1	12 do . . . . .	45 00
Enterprise and Wilkinson. . . . .	C. Lockwood. . . . .	8	2	3 do (to June 30, '90) . . . . .	20 00
do do . . . . .	J. Finn. . . . .	8	2	9 do from do . . . . .	36 75
Erinsville and Napanee . . . . .	J. Grange . . . . .	21	6	12 do . . . . .	475 00
Flinton and Tweed. . . . .	R. E. Jones. . . . .	16	6	12 do . . . . .	456 72
Fowler's Corners and Peterboro. . . . .	A. Reid . . . . .	7½	2	12 do . . . . .	90 00
Frankford and Railway Station. . . . .	J. Chapman . . . . .	200 yds	12	12 do . . . . .	78 00
Frankford and Stockdale . . . . .	do . . . . .	2	3	12 do . . . . .	45 00
Frankville and Railway Station. . . . .	W. Dowsley . . . . .	11	6	12 do . . . . .	239 00
Fuller and Thomasburg. . . . .	M. Mitts. . . . .	4½	2	12 do . . . . .	48 00
Gananoque and Seeley's Bay . . . . .	W. Kenny. . . . .	14	2	12 do . . . . .	145 00
Gananoque and Street Letter Boxes. . . . .	E. Keating . . . . .	1	12	2 do (to May 31, '90) . . . . .	26 50
do do . . . . .	do . . . . .	2½	13	10 do from do . . . . .	152 06
Gananoque and Wilstead . . . . .	N. Gardner. . . . .	4	3	12 do . . . . .	94 00
Gananoque Station and G. T. Rail- way Junction . . . . .	B. Barber . . . . .	3½	26	3 do (to June 30, '90) . . . . .	6 25
do do . . . . .	R. C. Carter . . . . .	3½	26	9 do from do . . . . .	18 75
Gelert and Railway Station. . . . .	W. F. Ritchie . . . . .	12	12	12 do . . . . .	50 00
Gilbert's Mills and Picton. . . . .	A. J. Ryckman. . . . .	10½	3	3 do (to June 30, '90) . . . . .	30 00
do do . . . . .	J. D. Gilbert. . . . .	10½	3	9 do from do . . . . .	78 00
Gilmour and Railway Station . . . . .	J. Caverly . . . . .	20 ft.	12	12 do . . . . .	20 00
Glanmire and Millbridge . . . . .	J. Lummiss. . . . .	8	1	12 do . . . . .	52 00
Glastonbury and Kaladar . . . . .	A. A. Dunham. . . . .	4½	2	12 do . . . . .	39 00
Glenburnie and The Corners. . . . .	W. Shurtleff . . . . .	½	6	3 do (to June 30, '90) . . . . .	15 00
do do . . . . .	S. Shurtleff . . . . .	½	6	9 do from do . . . . .	45 00
Glen Millar and Trenton. . . . .	G. Weston . . . . .	3½	6	12 do . . . . .	125 00
Glen Ross and Railway Station . . . . .	O. T. Iveson . . . . .	20 yds	6	9 do (to Dec. 31, '90) . . . . .	22 50
do do . . . . .	D. McMurphy. . . . .	20 yds	6	3 do from do . . . . .	7 50
Glenvale and Sharpton . . . . .	G. D. Hann . . . . .	3	2	12 do . . . . .	60 00
Godfrey and Mayburn. . . . .	T. Buckley. . . . .	7	1	2 do (from Feb. 1, '91) . . . . .	5 00
Gooderham and Kinnmount. . . . .	W. H. Davis . . . . .	21	2	3 do (to June 30, '90) . . . . .	37 50
do do . . . . .	W. J. Wilson. . . . .	21	2	9 do from do . . . . .	112 50
Gooderham and Ursa . . . . .	S. Kettle. . . . .	6	1	12 do . . . . .	30 00
Grafton and Railway Station . . . . .	G. Lumley. . . . .	1	7	3 do (to June 30, '90) . . . . .	22 43
do do . . . . .	J. Cochran . . . . .	1	7	9 do from do . . . . .	67 29
Green Point and Picton. . . . .	C. Reynolds. . . . .	12	2	Season 1890. . . . .	67 00
Gunter and Railway Station . . . . .	J. H. Gunter. . . . .	6	2	12 months. . . . .	80 00
Haliburton and Kennaway. . . . .	J. E. Holmes . . . . .	38	1	12 do . . . . .	285 00
Haliburton and Railway Station . . . . .	J. Dover . . . . .	¼	12	12 do . . . . .	50 00
Haliburton and Wickstead. . . . .	D. H. Anderson. . . . .	10	1	12 do . . . . .	40 00
Hartsmere and Hermon . . . . .	G. A. Bremner. . . . .	8½	2	12 do . . . . .	90 00
Havelock and Oak Lake . . . . .	S. Hubble. . . . .	16	1	3 do (from Jan. 1, '91). . . . .	20 00
Havelock and Railway Station . . . . .	A. V. Fuller . . . . .	50 yds	18	12 do . . . . .	56 34
Havelock and Tilton . . . . .	M. J. Peters. . . . .	6	3	12 do . . . . .	138 00
Hay Bay and Napanee . . . . .	N. Woodcock. . . . .	19	2	12 do . . . . .	163 00
Hayburn and Parma . . . . .	E. Loyst . . . . .	2	3	12 do . . . . .	50 00
Hiawatha and Peterboro' . . . . .	O. A. Cragg . . . . .	11	2	12 do . . . . .	145 00
Hillier and Railway Station. . . . .	H. Palmer. . . . .	½	12	12 do . . . . .	93 90
Hillier and Rosehall . . . . .	R. McCartney. . . . .	2½	3	12 do . . . . .	106 00
Hinch and Newburg. . . . .	B. Lewis. . . . .	6	2	12 do . . . . .	70 00
Howe Island and Pitts Ferry . . . . .	A. O'Brien . . . . .	4	3	12 do . . . . .	150 00

DETAIL of all payments for Mail Transportation in Kingston Postal Division,  
&c.—Continued.

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					8 cts.
Indian River and Railway Station.	M. Guerin.....	3	2	12 months.	80 00
Indian River Station and Railway Station	J. Duff.....	$\frac{1}{16}$	6	12 do	25 00
Ivy Lea and Lansdowne	J. Ivey.....	4	2	12 do	55 00
Jellyby and Railway Station.	A. Wing.....	300 yds	3	12 do	25 00
Jermyn and Lang.	G. English.....	4	3	12 do	70 00
Jones' Falls and Morton	A. Scott.....	3	3	12 do	63 00
Keene and Railway Station	R. McIntyre.....	$1\frac{1}{2}$	12	12 do	119 00
Kingston and Kingston Station	T. C. Wilson.....	2	6	12 do	31 30
Kingston and Military Camp	F. A. Birch.....			Special trips	6 00
Kingston and Newboro'	R. W. Copeland.....	41	6	12 months.	1,094 00
Kingston and Newburgh	C. H. Finkle.....	27	6	12 do	600 00
Kingston and Perth Road	J. Miller.....	18	6	12 do (less fines).	433 48
Kingston and Portsmouth	T. C. Wilson.....	$2\frac{1}{2}$	12	12 do	225 00
Kingston and Street Letter Boxes.	B. McConville.....		15	do (to June 30, '91)	641 50
Kingston and Willetsholme	N. F. Darling.....	16	3	12 do	225 00
Kingston Station and Grand Trunk Junction	T. Hanley.....	2	26	12 do	36 00
Kinnmount and Mount Irwin	T. Peacock.....	7	1	12 do	35 00
Lakefield and Lakehurst	A. Johnston.....	19	3	12 do	239 00
Lakefield and Railway Station	J. Cooper.....	$\frac{1}{4}$	18 & 12	12 do	112 05
Lake Opinicon and Perth Road	L. Johnson.....	10	3	3 do (to June 30, '90)	34 00
do do	S. Sears.....	10	3	9 do from do	67 50
Lang and Railway Station	A. Colville.....	1	12	12 do	90 00
Lansdowne and Sand Bay	W. H. Fodey.....	$8\frac{1}{2}$	3	12 do	109 20
Lansdowne and Tilly	H. Bradley.....	$3\frac{1}{2}$	1	12 do	30 00
Latimer and Wolf's Corners	B. S. Wartman.....	1	3	12 do	70 00
Lavant and Plevna	W. C. P. Plotz.....	23	3	12 do (less fine)..	388 00
Leinster and Roblin	F. Paul.....	7	2	12 do	67 00
Lime Lake and Marlbank	J. Henderson.....	4	3	12 do	78 50
Long Lake and Mountain Grove	J. Bender.....	7	2	12 do	84 00
Lonsdale and Marysville	J. Whiteman.....	4	3	5 do (to Aug. 31, '90)	41 66
Lyn and Railway Station	J. Baird.....	1	6	12 do	62 60
Lyndhurst and Seeley's Bay	W. D. Wetherel.....	8	6	12 do	168 00
McKenzie Lake and Maynooth	J. Cannon.....	13	1	12 do	88 00
McLean and Mountain Grove	D. C. McLean.....	8	1	12 do	52 00
Madoc and Railway Station (C.O.)	R. S. Allt.....	7	12	12 do	313 00
do do (Mid'd)	S. Barnum.....	$\frac{1}{2}$	12	12 do	62 60
do do (C.P.R.)	W. Hulin.....	$6\frac{1}{2}$	14	11 days (to Dec. 18, '90)	5 97
Madoc and Queensboro'	W. Wiggins.....	8	6	12 months.	200 00
Madoc and Tweed	W. Hulin.....	13	6	12 do	312 00
Mallorytown and Poole's Resort	G. E. Address.....	5	6 & 3	12 do	90 00
Mallorytown and Rockfield	J. Herbison.....	5	2	12 do	80 00
Mallorytown and Rockport	J. Dickey.....	12 $\frac{1}{2}$	6	12 do	248 00
Mallorytown and Yonge's Mill	B. Burnham.....	4	2	12 do	60 00
Malone and Railway Station	C. Thompson.....	$4\frac{3}{4}$	3	11 do (to Feb. 28, '91)	35 75
do do		$4\frac{3}{4}$	6	1 do from do	6 50
Maple Lake and Minden	C. E. Melville.....	20	1	12 do	80 00
Marble Rock and Gananoque Station	B. S. Bradley.....	$4\frac{1}{2}$	2	12 do	60 00
Marmora and Railway Station	N. McWilliams.....	23	12	12 do	125 00
Marmora and Stirling	do	16	6	12 do	400 00
Maynooth and Ormsby	W. H. Jarman.....	31	6	12 do	1,100 00
Melrose and Read	I. Ray.....	24	6	12 do	249 80
Milford and Pictou	E. H. Thibault.....	10	6	3 do (to June 30, '90)	35 00
do do	T. M. Martin.....	10	6	3 do (to Sept. 30, '90)	78 25
do do	W. Ogden.....	10	6	6 do from do	96 00
Milford and Point Traverse	J. J. Vandusen.....	$9\frac{1}{2}$	2	6 do (to Sept. 30, '90)	41 90
do do	do	$10\frac{1}{2}$	2	6 do from do	46 32
Millbridge and Railway Station	D. Hogan.....	14	6	12 do	100 00
Moir and Plainfield	W. H. Dean.....	8	3	12 do	125 00



DETAIL of all payments for Mail Transportation in Kingston Postal Division,  
&c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					8 cts.
Moneymore and Roslin.....	J. Thompson....	6½	1	12 months .....	30 00
Mountain Grove and Ry. Station...	A. McDonald....	100 yds	12	12 do .....	20 00
Murray and Railway Station.....	S. Homan.....	1	12	12 do .....	90 00
Napanee and Street Letter Boxes ..	G. Bogart.....	1½	18	12 do .....	75 00
Napanee and Switzerville.....	P. E. R. Miller..	6	3	12 do .....	90 00
Naphan and Plainfield.....	J. D. Naphan....	13	1	11 do (to Feb. 28, '91) ..	45 02
do do .....	do .....	13	2	1 do from do .....	7 91
Newboro' and Smiths Falls .....	J. W. Preston ..	27 & 29	6	12 do .....	593 00
New Dublin and Railway Station...	N. E. Brown....	3½	3	12 do .....	65 00
Norwood and Railway Station.....	E. Gould.....	½	20	12 do .....	156 45
Norwood and Warkworth, &c.....	do .....	16 & 6	6	12 do .....	500 00
Norwood and Round Lake.....	H. Gerow.....	15	1	9 do (to Dec. 31, '90) ..	60 00
Odessa and Railway Station..	A. Wycott.....	5	12	12 do .....	220 00
Odessa and Violet.....	J. N. Storms....	6	6	12 do .....	100 00
Ompah Station and Railway Station	A. Wright.....	20 yds	3	12 do .....	12 00
Ormsby and Railway Station.....	G. L. Jarman....	½	12	12 do .....	50 00
Ormsby and Thanet.....	M. Murphy.....	5	2	12 do .....	70 00
Oso Station and Zealand.....	W. Armstrong....	3½	2	12 do .....	45 00
Overton and Roblin.....	W. M. Paul.....	3½	2	12 do .....	60 00
Perth and Westport.....	A. P. Palmer....	23	2	12 do .....	175 00
Perth Road and Wilmur.....	J. S. Roberts....	2	3	12 do .....	48 48
Peterboro' and Railway Station...	J. Buller.....	½	60	12 do .....	391 25
do do (O. & Q.).....	do .....	½	31	12 do .....	202 12
Peterboro' and Street Letter Boxes ..	H. C. Rogers....	4½	12	12 do .....	200 00
Peterboro' and Warsaw.....	D. McIntosh....	16	6	12 do .....	276 00
Pictou and Railway Station.....	J. B. Sherriff... ¾	18	12	12 do .....	125 00
Pictou and Sand Banks.....	J. Hicks.....	10 ½	6 & 2	3 do (to June 30, '90) ..	33 75
do do .....	H. Hicks.....	10½	6 & 2	9 do from do .....	90 79
Pictou and Solmesville.....	H. Goodwin....	17	6	12 do .....	349 00
Pictou and Street Letter Boxes.....	T. Shannon.....	1	12	12 do .....	78 25
Precious Corners and The Corners...	J. R. O'Neill....	300 yds	6	12 do .....	22 50
Railton and Murvale Station.....	J. O'Reilly.....	4½	6	12 do .....	156 00
Roblin and West Plain.....	A. Sedore.....	3	2	12 do .....	21 25
St. Lawrence and Wolfe Island.....	S. D. Woodman..	12	1	12 do .....	100 00
St. Ola and Railway Station.....	P. P. Clark.....	2	6	3 do (to June 30, '90) ..	12 50
do do .....	J. Baker.....	2	6	9 do from do .....	60 00
Sharbot Lake and Railway Station...	M. Avery.....	¾	14	12 do .....	146 00
Springville and Railway Station...	W. Bidgood....	3	6	12 do .....	138 00
Stirling and Railway Station.....	W. Gould.....	½	12	6 do (to Sept. 30, '90) ..	31 20
do do .....	H. S. Ferguson..	½	12	6 do from do .....	28 08
Stony Lake and Warsaw.....	H. Bell.....	12	1	6 do (to Sept. 30, '90) ..	37 50
do do .....	C. Bell.....	12	1	6 do from do .....	37 50
Thwaites and Railway Station.....	D. W. Thwaites..	3	1	12 do .....	20 00
Trenton and Railway Station .....	J. S. Dyer.....	¾	30	12 do .....	195 00
Trenton and Wooler.....	H. Sharp.....	9	6	12 do .....	175 00
Trenton Junction—C. O. Railway and G. T. Railway.....	G. W. Dench....	¾	As req	12 do .....	156 50
Tuftsville & North Hastings Junct'n	S. Tufts.....	1½	6	12 do .....	20 00
Tweed and Railway Station.....	W. J. Bowell....	¾	20	12 do .....	156 45
Villiers and Railway Station.....	W. Weir.....	2	3	12 do .....	75 36
Wellington and Railway Station... do do .....	M. Pettit..... D. E. Clarke....	¾ ½	12 12	1 do 14 days (to May 14, '90) .. do 17 dys. from do ..	7 86 57 14
Wellman's Corners and Ry. Station.	P. Hubble.....	2	3	12 do .....	75 00

DETAIL of all payments for Mail Transportation in Kingston Postal Division,  
&c.—*Concluded.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Westport and Railway Station....	J. H. Whelan...	20	6	12 months .....	492 00
Westwood and Railway Station....	J. S. Comstock..	21 <sup>1</sup> / <sub>2</sub>	6	9 do (to Dec. 31, '90)...	93 75
do do .....	J. Esson .....	21 <sup>1</sup> / <sub>2</sub>	6	3 do from do ..	30 03
				Total.....	\$39,453 27

WILLIAM WHITE,  
*Deputy Postmaster General.*

W. H. SMITHSON,  
*Accountant.*

## LONDON POSTAL DIVISION.

DETAIL of all payments for Mail Transportation in London Postal Division,  
made within the Year ended 30th June, 1891.

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Aberarder and Railway Station...	D. N. Sinclair...	1 <sup>3</sup> / <sub>2</sub>	6	12 months	40 00
Adare and Maguire...	A. Tod...	2 <sup>1</sup> / <sub>2</sub>	3	12 do	50 00
Adelaide and Strathroy...	J. Harris...	8 <sup>1</sup> / <sub>2</sub>	6	12 do	225 00
Ailsa Craig, Denfield and Ry. Station	J. Edwards...	6	6 & 12	12 do	220 00
Ailsa Craig and Railway Station...	E. Shannon...	1 <sup>1</sup> / <sub>2</sub>	6	12 do	50 00
Albuna and Cottam...	E. S. Irwin...	6 <sup>1</sup> / <sub>2</sub>	2	3 do (to June 30, '90)...	18 18
do do	J. E. Hillier...	6 <sup>1</sup> / <sub>2</sub>	2	9 do from do	60 00
Aldboro' and Rodney...	N. Gray...	6	6	6 do (to Sept. 30, '90)...	72 00
do do	A. Ruthven...	6	6	6 do from do	70 00
Alvinston and Railway Station...	G. Temple...	1 <sup>1</sup> / <sub>2</sub>	12	12 do	112 00
Amherstburg and Oxley...	A. Fox...	19	6	2 do (to May 31, '90)...	145 75
Amherstburg and Railway Station...	do	1	12	12 do	195 60
Amherstburg and Windsor, &c...	do	18	6 & 3	12 do	460 00
Amiens and Lobo...	R. Sharpe...	12 <sup>1</sup> / <sub>2</sub>	3	12 do	116 96
Appin and Glen Willow...	J. Reilly...	5 <sup>1</sup> / <sub>2</sub>	3	12 do	90 00
Appin and Mayfair...	J. E. Campbell...	4 <sup>1</sup> / <sub>2</sub>	3	12 do	100 00
Appledore and Railway Station...	O. B. Arnold...	2 <sup>1</sup> / <sub>2</sub>	2	12 do	64 48
Arkona and Keyser...	W. J. Evans...	5 <sup>1</sup> / <sub>2</sub>	2	12 do	75 00
Arkona and Thedford...	W. Hester...	7 <sup>1</sup> / <sub>2</sub>	6	12 do	140 00
Arkona and Watford...	F. Hooper...	12	6	12 do	450 00
Arner and Railway Station...	S. Agla...	1 <sup>1</sup> / <sub>2</sub>	3	9 do (to Feb. 28, '91)...	15 21
do do	do	4 <sup>1</sup> / <sub>2</sub>	6	1 do from do	3 38
Arva and Ballymote...	J. H. Shobottom...	3	2	12 do	65 00
Atherton and Delhi...	A. Wilson...	3	2	12 do	45 00
Aughrim and Bothwell...	W. McAlpine...	10	6	12 do	249 00
Aughrim and Mosside...	J. McCabe...	4 <sup>1</sup> / <sub>2</sub>	3	12 do	100 00
Aughrim and Tancered...	G. Hand...	2	2	12 do	39 00
Avon, Putnam and Railway Station	J. A. Kinnee...	6	6 & 12	12 do	350 00
Avonry and Wilkesport...	J. Burden...	2 <sup>1</sup> / <sub>2</sub>	2	12 do	40 00
Aylmer and Dorchester Station...	D. S. Treadwell...	20	6	12 do	365 00
Aylmer and Dunboyne...	W. L. Pierce...	31	6	12 do	500 00
Aylmer and Railway Station...	do	3 <sup>1</sup> / <sub>2</sub>	24	12 do (less fine)...	312 00
Aylmer and Seville...	R. C. Wright...	4	2	12 do	48 00
Baby's Point and Port Lambton...	W. H. McDonald...	1	3	1 do (to April 30, '90)...	4 17
Bayham and Ingersoll...	W. H. Cook...	20	6	12 do	395 00
Beachville and Embro...	J. B. Johnson...	6	6	12 do	140 00
Becher and Wallaceburg...	J. A. McLean...	5	3	12 do	95 00
Beech Lane and Tilsonburg...	E. Gale...	20	6	3 do (to June 30, '90)...	99 75
do do	do	21 <sup>1</sup> / <sub>2</sub>	6	5 do (to Nov. 30, '90)...	226 56
do do	do	23 <sup>1</sup> / <sub>2</sub>	6	4 do from do	193 75
Belle River and Byrnedale...	W. Byrne...	5 <sup>1</sup> / <sub>2</sub>	1	12 do	55 00
Belmont and London...	C. W. Barrows...	13	6	12 do	145 00
Belmont and Railway Station...	J. Evans...	1 <sup>1</sup> / <sub>2</sub>	12	3 do (to June 30, '90)...	17 25
do do	J. Charles...	3 <sup>1</sup> / <sub>2</sub>	12	9 do from do	49 50
Belton and Railway Station...	J. Gibson...	12	12	12 do	40 00
Belton and St. Ives...	H. Powell...	9 <sup>1</sup> / <sub>2</sub>	2	12 do	117 76
Bentpath and Dresden...	J. McLachlin...	7	2	12 do	89 00
Bickford and Railway Station...	F. W. Johnson...	100 yds	12	3 do (to June 30, '90)...	7 50
do do	J. Baxter...	100 yds	12	9 do from do	30 00
Big Point and Dover South...	A. Cheff...	7 <sup>1</sup> / <sub>2</sub>	2	11 do (to Feb. 28, '91)...	55 00
do do	do	7 <sup>1</sup> / <sub>2</sub>	3	1 do from do	7 50
Birr and Devizes, &c...	J. Lambourne...	5 & 7	6 & 2	12 do	220 00
Blackwell Station and Ry. Station...	P. Wellington, jr...	1 <sup>1</sup> / <sub>2</sub>	2	12 do	26 00
Blandford Station and Ry. Station...	A. Church...	1 <sup>1</sup> / <sub>2</sub>	12	3 do (to June 30, '90)...	7 00
do do	E. Eaton...	1 <sup>1</sup> / <sub>2</sub>	12	9 do from do	21 00
Blenheim and Leanington...	J. Minnis...	38 <sup>1</sup> / <sub>2</sub>	6	6 do (to Sept. 30, '90)...	597 50
do do	J. McGaw and J. Watson (sureties)...	38 <sup>1</sup> / <sub>2</sub>	6	6 do from do (less fine)	595 50



DETAIL of all payments for Mail Transportation in London Postal Division,  
&c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Blenheim and Morpeth . . . . .	M. C. Dexter . . . . .	10	6	12 months . . . . .	275 00
Blenheim and Railway Station . . . . .	G. A. Breeze . . . . .	12	12	do . . . . .	50 08
Blenheim and Rondeau, &c. . . . .	J. M. Burk . . . . .	5 7	3 & 6	6 do (to Sept. 30, '90).	68 00
do do . . . . .	J. B. Reynolds . . . . .	5 5	3 & 6	6 do from do . . . . .	67 50
Blytheswood and Goldsmith . . . . .	W. Ogle . . . . .	5	3	12 do . . . . .	80 00
Blytheswood and Railway Station . . . . .	H. P. Jeffery . . . . .	3	6	12 do . . . . .	112 68
Bornish and Sable . . . . .	A. McDonald . . . . .	3	2	12 do . . . . .	45 00
Botany and Thamesville . . . . .	P. M. McBrayne . . . . .	5 1	2	12 do . . . . .	84 00
Bothwell and Clachan . . . . .	A. McArthur . . . . .	6	3	12 do . . . . .	106 25
Bothwell and Florence . . . . .	J. G. Armstrong . . . . .	9	6	12 do . . . . .	260 00
Bothwell and Moravian Town . . . . .	W. Gooding . . . . .	4	2	12 do . . . . .	65 00
Bradshaw and Bridgen . . . . .	W. Bradshaw . . . . .	5	2	12 do . . . . .	65 00
Brandy Creek and Railway Station . . . . .	J. Winternute . . . . .	6	12	do . . . . .	40 00
Brantford and Eagle's Nest . . . . .	Hunt & Colter . . . . .	6	3	do (from Jan. 1, '91)	7 50
Brantford and Harley . . . . .	R. Cavin . . . . .	14	6	12 do . . . . .	364 00
Brantford and Langford . . . . .	W. Reed . . . . .	8	6	12 do . . . . .	234 00
Brantford and Mohawk, &c. . . . .	R. Cavin . . . . .	12 & 4	3 & 6	12 do . . . . .	247 00
Brantford and Railway Station . . . . .	Hunt & Colter . . . . .	1	54	12 do . . . . .	366 21
Brantford and Simcoe . . . . .	A. Hiller . . . . .	24	6	12 do . . . . .	840 00
Brantford and Street Letter Boxes . . . . .	Hunt & Colter . . . . .	6	12	11 do (to Feb. 28, '91).	256 67
do do . . . . .	do . . . . .	7	12	1 do from do . . . . .	26 25
Brewster and Parkhill . . . . .	S. Gratton . . . . .	16	3	12 do . . . . .	149 00
Bridgen and Railway Station . . . . .	J. Armstrong . . . . .	6	12	12 do . . . . .	86 00
Bright and Washington, &c. . . . .	A. Gatzka . . . . .	6 & 3	6 & 12	12 do . . . . .	255 00
Burford and Cathcart, &c. . . . .	R. Cavin . . . . .	5 & 3	3 & 6	12 do . . . . .	168 00
Burgessville and Newark . . . . .	J. Heath . . . . .	5	6	12 do . . . . .	180 60
Burgessville and Oriel . . . . .	W. B. Somerville . . . . .	8	3	12 do . . . . .	130 00
Burgessville and Railway Station . . . . .	E. W. Burgess . . . . .	3	12	12 do . . . . .	50 08
Byron and London . . . . .	J. Charles . . . . .	6	6	12 do . . . . .	150 00
Calder and Railway Station . . . . .	H. G. Jones . . . . .	23 1	2	12 do . . . . .	49 00
Caledonia and Cayuga . . . . .	E. Wigg . . . . .	11	6	12 do . . . . .	410 00
Caledonia and Conboyville . . . . .	S. Arrell . . . . .	6	2	12 do . . . . .	70 00
Caledonia and North Seneca . . . . .	F. Dawson . . . . .	3	6	10 do (to Jan. 31, '91).	102 66
Caledonia and Railway Stations . . . . .	P. McMullen . . . . .	1 2	36	12 do . . . . .	159 63
Caledonia and Six Nations . . . . .	J. A. Beaver . . . . .	4	2	11 do (to Feb. 28, '91).	55 00
do do . . . . .	do . . . . .	4	3	1 do from do . . . . .	7 50
Camlachie and Hillsborough . . . . .	C. L. Hill . . . . .	9	2	12 do . . . . .	140 00
Campbellton and West Lorne . . . . .	J. Martin . . . . .	6 1	3	12 do . . . . .	190 00
Canfield and Railway Station . . . . .	J. Switzer . . . . .	1 1 1	12	6 do (to Sept. 30, '90).	31 40
do do . . . . .	T. Brown . . . . .	1 1 1	12	6 do from do . . . . .	31 20
Cassels and Railway Station . . . . .	J. McDonald . . . . .	8 1	3	12 do . . . . .	149 76
Cayuga and Deans Station . . . . .	E. Wigg . . . . .	13 1	6	12 do . . . . .	87 64
Cayuga and Gypsum Mines . . . . .	M. Thompson . . . . .	3 1	6	12 do . . . . .	115 00
Cayuga and Kohler . . . . .	J. Booker . . . . .	4 1	3	12 do . . . . .	80 00
Cayuga and Upper . . . . .	J. Everets . . . . .	12	3	12 do . . . . .	145 00
Centralia, Crediton and Ry. Station . . . . .	J. Clark . . . . .	6 1	12	12 do . . . . .	200 00
Centralia and Mooresville . . . . .	R. Handford . . . . .	3 1	6	12 do . . . . .	200 00
Charing Cross and Doyle . . . . .	M. Doyle . . . . .	4 1	2	12 do . . . . .	70 00
Charing Cross and Railway Station . . . . .	J. Hunter . . . . .	1 1	12	12 do . . . . .	72 00
Charing Cross and Tilbury Centre . . . . .	H. W. Howell . . . . .	25	3	12 do (less fine) . . . . .	593 00
Chatham and Dover South . . . . .	G. W. Bourdeau . . . . .	6	6	12 do . . . . .	199 00
Chatham and Irwin . . . . .	T. Irwin . . . . .	5	2	12 do . . . . .	50 00
Chatham and Louisville . . . . .	H. J. Merritt . . . . .	6	3	12 do . . . . .	120 00
Chatham and Railway Station . . . . .	J. R. Reid . . . . .	3 1	36	12 do . . . . .	328 65
Chatham and Street Letter Boxes . . . . .	P. O. Flynn . . . . .	6 2 5	18	12 do . . . . .	419 56
Chatham and Van Horn . . . . .	J. Zink . . . . .	6	2	12 do . . . . .	70 00
Chatham and Williams . . . . .	R. Williams . . . . .	9	2	12 do . . . . .	80 00
Cheapside, Jarvis and Ry. Station . . . . .	W. Atkinson . . . . .	16	6 & 12	12 do . . . . .	449 00
Chevalier and Stony Point . . . . .	O. Marion . . . . .	1	12	9 do (to Dec. 31, '90).	75 00
do do . . . . .	A. Lenire . . . . .	1	12	3 do from do . . . . .	25 00
Christina and Mount Brydges . . . . .	T. Pearce . . . . .	4	2	11 do (to Feb. 28, '91).	41 25
do do . . . . .	do . . . . .	6 1	2	1 do from do . . . . .	6 25
Clanbrassil and Railway Station . . . . .	J. Cossar . . . . .	2	6	12 do . . . . .	60 00

DETAIL of all payments for Mail Transportation in London Postal Division,  
&c.—Continued.

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Clandeboyne and West McGillivray..	W. H. Weir...	7 $\frac{1}{2}$	6	12 months...	139 00
Clear Creek and Cultus.....	S. Tansley.....	5	2	9 do (to Dec. 31, '90)..	48 75
do do.....	W. N. Buck.....	5	2	3 do from do.....	18 75
Cobble Hill and Evelyn.....	A. J. Kernohan.....	2 $\frac{3}{4}$	2	12 do.....	149 94
Comber and Railway Station.....	J. Kaufman.....	12	12	do.....	100 00
Comber and Windfall.....	W. Owens.....	9	2	12 do.....	80 00
Comet and Vereker.....	D. Graveline.....	4	2	12 do.....	170 00
Copleston and Petrolia.....	N. Henriod.....	3 $\frac{1}{4}$	6	12 do.....	78 00
Corinth and Railway Station.....	R. Evans.....	25 rds.	12	12 do.....	76 00
Corunna and Railway Station.....	H. J. Miller.....	1 $\frac{1}{2}$	12	12 do.....	125 00
Cottam and Essex Centre.....	C. Wigle.....	5	6	6 do (to Nov. 30, '90)..	65 00
do do.....	J. C. Hicks.....	5	6	4 do from do.....	575 00
Courtland and Port Rowan.....	W. Smith.....	19	6	12 do.....	80 00
Courtland and Railway Station.....	do.....	$\frac{1}{4}$	12	12 do.....	78 25
Courtright and St. Clair Br'nch Stn	W. A. Cathcart.....	$\frac{1}{8}$	12	12 do.....	76 00
Courtright and Erie and Huron Ry.	do.....	$\frac{1}{3}$	12	12 do.....	79 00
Station.....	do.....	$\frac{1}{3}$	12	12 do.....	140 00
Cowal and Iona Station.....	G. McCallum.....	6	2	12 do.....	75 00
Cranston and Railway Station.....	J. King.....	4 $\frac{1}{2}$	6	12 do.....	87 00
Crinan and West Lorne.....	A. McIntyre.....	4 $\frac{1}{2}$	2	12 do.....	60 00
Croton and Dawn Mills.....	L. Philips.....	8	3	12 do.....	87 00
Currie's Crossing and Ry. Station..	W. D. Smith.....	$\frac{1}{2}$	6	12 do.....	10 00
Darrell and Railway Station.....	S. Duncan.....	20 rds.	6	12 do.....	439 00
Dashwood and Parkhill.....	J. S. Witzel.....	16 $\frac{1}{2}$	6	12 do.....	148 00
Dawn Mills and Dresden.....	L. Philips.....	4	6	12 do.....	230 00
Deans, Cayuga and Railway Station.	J. Shipway.....	2 & $\frac{1}{2}$	6 & 12	12 do.....	60 00
Decewsville and Railway Station.....	J. Heaton.....	300 yds	12	12 do.....	96 00
Delaware and London.....	F. Bladsdale.....	12	6	8 do (to Nov. 30, '90)..	48 00
do do.....	J. Sharp, jun.....	12	6	4 do from do.....	149 00
Delhi and Lynedoch.....	J. Powell.....	5	6 & 12	12 do.....	115 00
Delmer and Tilsonburg.....	J. H. Young.....	4 $\frac{1}{2}$	3	12 do.....	125 00
Denfield and Duncreeff.....	J. Hodgins.....	6 $\frac{1}{2}$	3	12 do.....	38 00
Denfield and Railway Station.....	J. Edwards.....	6 rods	12	12 do.....	53 17
Dereham Centre and Mount Elgin..	W. Short.....	3	2	11 do (to Feb. 28, '91)..	8 33
Dereham Centre and Mitchell's Cor-	do.....	2	6	1 do from do.....	85 00
ners.....	do.....	4 $\frac{1}{2}$	3	12 do.....	25 00
Dexter and Sparta.....	C. M. Pettit.....	3	1	12 do.....	137 00
Dolsen and Railway Station.....	B. Daly.....	3	1	12 do.....	160 00
Dresden and Railway Station.....	D. Turnbull.....	7 $\frac{1}{2}$	24	12 do.....	345 00
Drumbo and Railway Station.....	H. W. Burgess.....	3 & $\frac{1}{2}$	12	12 do.....	540 00
Duart and Palmyra, &c.....	W. M. Curtis.....	8 & $\frac{1}{4}$	6 & 12	12 do.....	199 55
Dunnville and Selkirk.....	A. Hedden.....	18	6	12 do.....	60 00
Eagle and West Lorne.....	J. Martin.....	4 $\frac{1}{2}$	12	12 do.....	21 00
Ealing and The Gore.....	P. Ackland.....	3	3	12 do.....	40 00
Eberts and Railway Station.....	A. Robertson.....	10 yds	12	12 do.....	50 00
Edgar's Mills and Railway Station.	E. Roadhouse.....	$\frac{1}{2}$	6	12 do.....	4 17
Elford and Essex Centre.....	I. Elford.....	4 $\frac{1}{2}$	1	12 do.....	340 00
Elmstead and Tecumseh.....	J. S. Austin.....	3 $\frac{1}{2}$	2	1 do (from Mar. 1, '91)	80 00
Embro and Harrington, &c.....	W. S. Vannatter.....	25	6	12 do.....	139 00
Erie and Jarvis.....	A. Finch.....	5	2	12 do.....	116 67
Essex Centre and Gesto.....	R. Hamilton.....	6 $\frac{1}{2}$	6	12 do.....	78 37
Essex Centre and Leamington.....	C. Wigle.....	22	12	2 do (to May 31, '90)..	35 25
Essex Centre and Railway Station..	T. Rush.....	$\frac{1}{4}$	18	8 do (to Nov. 30, '90)..	144 00
do do.....	do.....	$\frac{1}{4}$	12 & 17	4 do from do.....	335 00
Ettrick and Iderton, &c.....	J. Little.....	6 & $\frac{1}{2}$	3 & 12	12 do.....	187 80
Evelyn and London.....	A. J. Kernohan.....	13	6	12 do.....	224 00
Exeter and Railway Station.....	C. Snell.....	1	24	12 do.....	50 00
Falkland and Railway Station.....	W. T. Walker.....	9	6	12 do.....	12 00
Fargo and Railway Station.....	H. B. Lowe.....	300 yds	44	12 do.....	100 00
do do (transfer).....	do.....	...	12	12 do.....	
Fernhill and Poplar Hill.....	D. R. Owen.....	4 $\frac{1}{2}$	3	12 do.....	

DETAIL of all payments for Mail Transportation in London Postal Division,  
&c.—Continued.

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Fingal and Port Talbot.....	J. Brown.....	7	3	12 months.....	125 00
Fingal and St. Thomas.....	G. Penwarden..	7	6	12 do.....	149 00
Fingal and Shédén, &c.....	J. Church.....	31	6 & 12	12 do.....	190 00
Fisherville and Nelles Corners, &c.	J. Orth.....	4	6 & 12	12 do.....	137 00
Fletcher and Railway Station.....	A. G. Robertson.		12	9 do (to Dec. 31, '90)	33 75
do do.....	R. Sainsbury..		12	3 do from do.....	12 50
Florence and Oakdale.....	A. Lowrie.....	6	2	12 do.....	55 00
Florence and Rutherford.....	S. Hubbard.....	6	3	12 do.....	95 00
Forest and Railway Station.....	P. Smith.....	400 yds	6	12 do.....	43 82
Forest and Ravenswood.....	P. McCallum....	9	3	12 do.....	100 00
Forestville and Railway Station.....	H. C. Gifford....		12	12 do.....	125 00
Frome and Railway Station.....	J. Arnold.....		6	9 do (to Dec. 31, '90)	59 00
do do.....	W. F. Silcox....		6	3 do from do.....	19 25
Garnet and Railway Station.....	T. Sullivan.....	1	12	12 do.....	40 00
Gladstone and Harriettsville.....	L. McMurray....	3	6	12 do.....	88 00
Glanworth and Railway Station.....	J. Turnbull.....		6	12 do.....	62 60
Glencoe and Kilmartin.....	D. B. McIntyre..	4	3	12 do.....	85 00
Glencoe and Strathburne.....	J. Smith.....	2	6	12 do.....	120 00
Glencolin and Springfield.....	S. T. Young.....	3	3	12 do.....	80 00
Glendale and White Oak.....	C. Flawn.....	2	3	9 do (to Dec. 31, '90)	37 50
do do.....	J. A. Dicy.....	2	3	3 do from do.....	13 75
Glenmeyer and Kinglake.....	H. Walmsley....	3	3	12 do.....	80 00
Glenoak and Longwood.....	L. J. Hixon.....	8	2	12 do.....	69 00
Glenrae and Railway Station.....	A. Sutherland..	50 yds	12	9 do (to Dec. 31, '90)	15 00
do do.....	O. Jansohn.....	50 yds	3	3 do from do.....	5 00
Gleneshee and Lynedoch.....	O. Jones.....	11	6	12 do.....	300 00
Gordon and Railway Station.....	J. C. Duff.....	1	12	12 do.....	50 00
Granton and Whalen.....	J. H. Millson....	5	2	12 do.....	70 00
Granthurst and St. Mary's.....	J. Finnie.....	5	2	9 do (from July 1, '90)	45 00
Hagersville and Railway Station.....	S. Fleming.....	1	36	6 do (to Sept. 30, '90)	70 00
do do.....	D. Spears.....	1	36	6 do from do.....	70 00
Hagersville, Selkirk and Railway Station.....	M. Hess.....	14	6	12 do.....	313 00
Hagersville and Springvale.....	J. Holbrook....	4	6	12 do.....	60 00
do do.....	S. Skenner.....	4	6	12 do.....	70 00
Harley and Hatchley Station.....	B. Powell.....	4	2	12 do.....	75 00
Harley and New Durham.....	R. Cavin.....	5	6	12 do.....	132 00
Harrow and Railway Station.....	C. J. Pastorins..	1	6	10 do (from June 1, '90)	33 33
Hartford and Waterford.....	D. Kitchen.....	10	6	12 do.....	200 00
Harwich and Railway Station.....	M. O'Brien.....	7	6	6 do (to Sept. 30, '90)	108 50
do do.....	I. Secor.....	7	6	6 do from do.....	127 00
Hawtrey and Northfield Centre, &c.	J. W. Hainer....	12	6 & 12	12 do.....	394 00
Hawtrey and Railway Station.....	C. J. Treffry....	1	12	12 do.....	30 00
Heather and Walkers.....	D. McIntyre....	3	2	12 do.....	50 00
Hendrick and Mount Brydges.....	T. Pearce.....	6	1	7 do (to Oct. 31, '90)	22 75
Hickson and Railway Station.....	L. Elsley.....	1	12	3 do (to June 30, '90)	5 00
do do.....	T. J. Loveys....	1	12	9 do from do.....	15 00
Highgate and Railway Station.....	D. Teetzel.....	1	12	12 do.....	144 00
Highgate and Turin.....	do.....	5	3	12 do.....	100 00
Hillman and Leamington.....	R. Manery.....	6	2	12 do.....	75 00
Hubrey and Railway Station.....	W. Duguid.....	2	3	1 do (to April 30, '90)	3 75
do do.....	J. Elliot.....	2	3	11 do from do.....	55 00
Hyde Park Corners and Railway Station.....	L. McNames.....	1	3	12 do.....	40 00
Ingersoll and Lakeside.....	J. Judge.....	16	6	12 do.....	439 00
Ingersoll and Peebles.....	G. Corey.....	6	2	12 do.....	75 00
Ingersoll and Port Burwell.....	E. Gray.....	32	6	12 do.....	855 00
Ingersoll and Railway Station.....	J. Shannon.....		12	9 do (to Dec. 31, '90)	84 96
do do.....	W. McIntosh....		12	3 do from do.....	26 25
Ingersoll Street Letter Boxes.....	J. Moon.....	4	18	12 do.....	225 00



DETAIL of all payments for Mail Transportation in London Postal Division,  
&c.—Continued.

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Innerkip and Railway Station....	G. Hotson...	1	12	9 months (to Dec. 31, '90)	81 00
do do .....	L. Edwards...	1	12	3 do from do ..	24 64
Inwood and Railway Station.....	J. M. Courtright	25 yds	12	12 do .....	32 50
Iona and Railway Station.....	W. Fletcher....	2	12	12 do .....	125 00
Jaffa and Orwell .....	W. Faunt .....	3	2	1 do 15 days (to May 15, '90)....	5 56
do do .....	L. Ferguson....	3	2	5 do (from Nov. 1, '90)	16 67
Jarvis and Railway Station .....	E. Lea .....	24 & 18	12	do .....	238 50
Jura and Thedford.....	J. McCordie....	7 1/2	3	12 do .....	111 40
Keith and Tupperville .....	R. Killins .....	1 1/2	2	12 do .....	45 00
Kent Bridge and Thorncliffe .....	G. B. Shaw .....	3	2	12 do .....	50 00
Khiva and Shipka.....	W. Holt, jun....	2	2	12 do .....	39 49
Kimball and Railway Station.....	B. Gerow .....	1 1/2	6	12 do .....	25 00
Kimball and Seckerton .....	W. Gray .....	3	3	12 do .....	62 40
Kingscourt and Railway Station.....	R. H. Wilson....	1	3	12 do .....	47 25
Kingsmill and Mapleton .....	L. Johnson .....	4	6	12 do .....	163 00
Kingsmill and Railway Station.....	J. O. Robertson.	40 rds	12	12 do .....	43 84
Kingsville and Oxley.....	A. Elliott .....	10	3	2 do (to May 31, '90)	20 00
Kingsville and Pelee Island .....	H. T. Lidwell ..	20	1	3 do (to Sept. 30, '90)	142 50
do do .....	S. Graham .....	20	1	6 do from do ..	280 00
Kingsville and Railway Station.....	W. Pastorins....	1 1/2	12	7 do (to Dec. 31, '90)	14 58
do do .....	W. Black .....	1 1/2	12	3 do from do ..	17 50
Knappdale and Newbury.....	J. McDonald....	6	1	12 do .....	40 00
Lambeth and Raper .....	J. Howlett .....	4	2	12 do .....	48 00
Langton and Marston .....	E. Long .....	5	2	12 do .....	44 12
La Sallette and Railway Station...	J. Gibbons .....	1 1/2	24	12 do .....	60 00
Lawrence Station and Ry. Station.	A. Widdifield ..	5	6	12 do .....	154 94
Leamington and Railway Station ..	L. Wigle .....	3 1/2	24	10 do (to Jan. 31, '91)	41 67
do do .....	S. C. Wigle .....	3 1/2	12	10 do from June 1, '90	70 83
Leesboro and Thorndale .....	E. Hopkins .....	3 1/2	3	10 do .....	39 00
Lidcote and Railway Station .....	S. Duncan .....	1 1/2	2	10 do (to Jan. 31, '91)	25 00
Littlewood and Talbotville Royal ..	J. Wait .....	6	2	6 do from Oct. 1, '90	47 00
Littlewood and Tempo .....	W. H. May .....	3 1/2	2	6 do (to Sept. 30, '90)	20 00
London and Exhibition Grounds...	A. G. McWhinney (to pay) ..			Special trips .....	1 75
London and London East .....	H. Keys .....	1	24	12 months .....	140 00
London and London West .....	J. R. Gurd .....	1 1/2	12	12 do .....	80 00
London and Lucan .....	J. W. Orme .....	16 1/2	6	12 do .....	399 00
London and C. P. Railway Station.	T. R. Parker .....	1 1/4	6	2 do 15 days (to June 15, '90)....	16 25
do do .....	do .....	1 1/4	12	17 days (to July 3, '90)....	7 00
do do .....	Dominion Transfer Co .....	1 1/4	12	8 do 29 days from do (to Dec. 31, '90)	116 50
London and L. H. & B. Ry. Station.	Hendrie & Co. ....	1 1/4	24	9 do .....	150 00
do do .....	The Shedden Co. (Limited) .....	1 1/4	12	3 do from do ..	50 00
London and M. C. Railway Station.	do .....	1 1/4	12	12 do .....	200 00
London and Nairn .....	D. Sells .....	21 1/2	3	12 do .....	375 00
London and Odell .....	T. Tomlinson ..	2 1/2	3	9 do (to Dec. 31, '90)	41 25
do do .....	do .....	3 1/4	3	3 do from do ..	15 00
London and Street Letter Boxes....	M. O'Mara .....	4	12	12 do .....	78 25
Lowlands and Wanstead .....	W. J. Morris .....	5	1	2 do from Feb. 1, '91	8 33
Lucan, Clandeboye and Ry. Station.	J. Hodgins .....	3	12	9 do from July 1, '90	218 40
Lucan, McGillivray and Ry. Station	do .....	3	18	3 do (to June 30, '90)	117 00
Lucan and Railway Station .....	W. Porte .....	1 1/4	6	12 do .....	75 00
Lynn Valley and Railway Station....	E. Edmonds .....	1 1/4	12	12 do .....	25 00
Lynnville and Railway Station .....	W. Axford .....	2 1/4	6	12 do .....	99 00
McCready and Newbury .....	D. Ross .....	6	2	12 do .....	60 00
McGregor and Railway Station .....	F. A. Reaume ..	1 1/2	12	12 do .....	53 16

DETAIL of all payments for Mail Transportation in London Postal Division,  
&c.—Continued.

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Maidstone and Railway Station....	I. Halford.....	4	12	12 months.....	125 20
Mandamin and Vyner.....	T. Carrick.....	5	3	12 do.....	156 00
Maple Lodge and Railway Station....	G. Windsor.....	14	3	12 do.....	60 00
Melbourne and Middlemis.....	J. Greaves.....	4	6	12 do.....	150 00
Melbourne and Railway Station....	I. M. Cady.....	1	12	12 do.....	50 00
Mitchell's Bay and Oungah.....	A. P. Akins.....	8	2	12 do.....	120 00
Moore and Railway Station.....	J. Morrison.....	16	12	12 do.....	50 00
Morpeth and Thamesville.....	R. S. Walters.....	15	6	12 do.....	239 00
Mull and Railway Station.....	N. Watson.....	1	6	12 do.....	50 00
Muncey and Railway Station.....	A. McGregor.....	15 rds	12	12 do.....	35 00
Napier and Rokeby.....	A. Campbell.....	4	2	10 do from June 1, '90	41 67
Napier and Strathroy.....	W. W. Bowlby.....	11	6	12 do.....	350 00
Newbury and Wardsville.....	J. Wilson.....	3	12	6 do (to Sept. 30, '90)	74 50
do do.....	J. H. Cady.....	3	12	6 do from do.....	75 00
New Sarum and Railway Station....	G. W. Cloes.....	200 yds	12	12 do.....	156 50
Nixon and Railway Station.....	J. Bannister.....	300 yds	12	12 do.....	62 60
Nober and Railway Station.....	J. Lemon.....	100 yds	12	2 do (to May 31, '90)	4 17
do do.....	G. Barlow.....	100 yds	12	10 do from do.....	20 83
Normandale and Vittoria.....	S. Otley.....	4	3	12 do.....	68 00
North Buxton and Railway Station....	G. B. Shreve.....	1	12	12 do.....	40 00
Norwich and Railway Station.....	J. Lawrason.....	3	24	12 do.....	117 50
Oakland and Windham Centre.....	G. Taylor.....	13	6 & 12	12 do.....	372 00
Ohswéken and Tuscarora.....	J. Porter.....	3	3	3 do (to June 30, '90)	25 00
do do.....	S. J. McKelvey.....	3	3	9 do from do.....	71 25
Oil City and Wheeler.....	J. Galloway.....	6	2	12 do.....	100 00
Oil City and Railway Station.....	R. S. Grant.....	16	12	12 do.....	93 90
Oil Springs and Railway Station....	T. Smith.....	200 yds	12	12 do.....	62 60
Oldcastle and Railway Station.....	M. McCarthy.....	4	3	2 do (to June 30, '90)	23 33
do do.....	do.....	100 yds	12	10 do from do.....	41 67
Olinda and Ruthven.....	F. A. Wigle.....	23	6	12 do.....	150 00
Oliver and Thorndale.....	J. G. McLeod.....	6	2	12 do.....	100 00
Oneida and Railway Station.....	J. A. Munny.....	13	6	12 do.....	125 00
Onondago and Railway Station.....	L. Buckwell.....	1	6	12 do.....	109 55
Orwell and Railway Station.....	W. J. Gegan.....	13	12	12 do.....	117 00
Ossian and Sarnia.....	M. Nesbitt.....	17	3	12 do.....	318 28
Otterville and Railway Station.....	P. Mitchell.....	1	12	12 do.....	100 16
Oungah and Wallaceburg.....	D. McLean.....	11	6	12 do.....	300 00
Oxley and Railway Station.....	A. Elliott.....	6	6	10 do (from June 1, '90)	241 67
Paris and Railway Station.....	H. Oliver.....	1	36	12 do.....	375 60
Paris and Street Letter Boxes.....	G. Stanton.....	2	12	12 do.....	96 00
Parkhill and Railway Station.....	G. Simpson.....	1	12	12 do.....	85 00
Parkhill and Strathroy.....	H. McKone.....	18	3	12 do.....	265 00
Patillo and Railway Station.....	D. Coutts.....	1	6	12 do.....	25 00
Peléé Island and Peléé Island East.	G. Gow.....	11	1	12 do.....	70 00
Perch Station and Railway Station....	T. Irwin.....	2	9	do (to Dec. 31, '90)	37 50
do do.....	R. Bright.....	2	3	do from do.....	12 50
Petrolia and Railway Station.....	P. Barclay.....	24	12	12 do.....	100 00
Petrolia and Wilsoncroft.....	J. L. Wilson.....	4	2	12 do.....	93 75
Pike Creek and Tecumseh.....	G. Bedell.....	2	3	12 do.....	60 00
Pond Mills and Railway Station.....	J. Gilmore.....	3	3	12 do.....	75 00
Port Burwell and Port Rowan.....	T. Thompson.....	22	6	12 do.....	470 00
Port Dover and Railway Stations....	R. Evans.....	3	6 & 12	12 do.....	89 00
Port Dover and Victor.....	W. R. Reid.....	4	3	9 do (to Dec. 31, '90)	56 25
do do.....	H. W. Ansley.....	4	3	1 do (from Mar. 1, '91)	9 17
Port Franks and Thedford.....	G. Kipp.....	6	3	1 do (to April 30, '90)	9 58
do do.....	G. Burley.....	6	3	11 do from do.....	105 42
Port Lambton and Railway Station....	W. H. McDonald.....	12	12	12 do.....	50 00
Port Rowan and Railway Station.....	R. W. Meadows.....	12	12	12 do.....	100 00
Port Ryerse and Simcoe.....	P. McCoy.....	6	6	12 do.....	169 00
Port Stanley and Railway Station.....	M. Payne.....	2	24	12 do.....	160 00

DETAIL of all payments for Mail Transportation in London Postal Division,  
&c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Ratho and Railway Station.....	G. Steedsman.....	1	6	12 months.....	52 00
Renton and Railway Station.....	W. Renton.....	1	12	12 do.....	78 00
Renton and Tyrrell.....	W. Blanchard.....	1	3	12 do.....	52 00
Richwood and Railway Station.....	W. Taylor.....	1	6	12 do.....	78 25
Ridgetown and Railway Station.....	L. S. Hancock.....	1	18	8 do (to Nov. 30, '90)	100 32
do do.....	do.....	1	12 & 17	4 do from do.....	44 64
Rockford and Railway Station.....	R. Russell.....	4	6	12 do.....	150 00
Rodney and Railway Station.....	A. Humphrey.....	30 yds	12	12 do.....	62 60
Round Plains and Watertord.....	B. H. Rammage.....	4	3	12 do.....	95 00
Rowan Mills and Walsingham Centre	S. Bresseau.....	7	3	12 do.....	114 00
Ruscom Station and Railway Station	F. D. Mathers.....	50 yds	12	12 do.....	10 00
Ruthven and Railway Station.....	F. A. Wigle.....	1	12	7 do (to Dec. 31, '90)	35 00
do do.....	T. H. Wigle.....	1	12	3 do from do.....	19 50
St. George and Railway Station....	W. O. Vanatter.....	1	24	9 do (to Dec. 31, '90)	188 80
do do.....	J. Woodley.....	1	24	3 do from do.....	61 60
St. Joachim, River Ruscom and Railway Station.....	J. Bacon.....	3	6	12 do.....	135 00
St. Thomas and Railway Stations..	M. A. Boughner.....	1	72	12 do.....	544 62
St. Thomas and Sparta.....	W. Gregory.....	11	6	12 do.....	185 00
St. Thomas and Street Letter Boxes.	F. E. Ernatinger.....	3	12	12 do.....	175 00
St. Thomas and Talbotville Royal..	J. Wait.....	3½	6	12 do.....	120 00
St. Williams and Railway Station..	J. H. Cope.....	1	12	12 do.....	100 00
Sandwich and Windsor.....	S. Page.....	2	6	12 do.....	180 00
Sarnia and Railway Station.....	J. J. Ross.....	100 yds	12	12 do.....	93 90
Sarnia Station and Point Edward..	T. Symington.....	2	6	6 do (to Sept. 30, '90)	78 50
do do.....	H. W. Mills.....	2	6	6 do from do.....	78 00
Sarnia and Port Huron, U.S.....	J. P. Dawson.....	2	12	12 do.....	150 00
Sarnia and Street Letter Boxes.....	do.....	1	12	12 do.....	137 33
Shetland and Sutherland's Corners.	J. W. McKeown.....	5	3	12 do.....	90 00
Silver Hill and Tain.....	M. A. Richards.....	2½	2	4 do (from Dec. 1, '90)	6 93
Simcoe and Air Line Station.....	H. W. Pursel.....	1	12	12 do.....	146 00
Simcoe and Railway Stations.....	do.....	1	12	12 do.....	155 12
Sombra and Railway Station.....	J. Mullins.....	1	12	9 do (to Dec. 31, '90)	37 50
do do.....	J. Whiteley.....	1	12	3 do from do.....	12 50
Sombra and Thornyhurst.....	H. G. Waybrant.....	6	2	8 do (to Nov. 30, '90)	40 00
do do.....	R. McNeil.....	6	2	4 do from do.....	20 00
Sombra and Wilkesport.....	W. Micks.....	8	6	12 do.....	180 00
Springfield and Railway Station..	J. Dennis.....	1	12	12 do.....	88 00
Springford and Railway Station.....	A. Leach.....	3	6 & 12	12 do (less fine).....	173 00
Staples and Railway Station.....	R. F. Staples.....	30 rds	6	12 do.....	25 00
Strathallan and Woodstock.....	R. Langdon.....	14	6	9 do (to Dec. 31, '90)	288 75
do do.....	G. Teetzel.....	14	6	3 do.....	75 00
Strathroy and Street Letter Boxes.	H. McColl.....	220 yds	18	12 do.....	50 00
Sweaburg and Woodstock.....	H. McCully.....	6	3	6 do (to Sept. 30, '90)	47 50
do do.....	W. H. Barton.....	6	3	6 do from do.....	43 00
Sylvan and Widder.....	W. Randall.....	3	6	12 do.....	140 00
Talbotville Royal and Tempo.....	J. Wait.....	2½	2	6 do (to Sept. 30, '90)	25 00
Tavistock and Railway Station.....	G. Matheson.....	12	12	12 do.....	50 00
Theford and Railway Station.....	J. G. Brown.....	300 yds	6	12 do.....	50 00
The Grove and Railway Station.....	T. A. Robinson.....	1	12	12 do.....	50 00
The Mattawas and Railway Station.	C. J. Stodgell.....	1	12	3 do (to Sept. 30, '90)	1 25
Tilbury Centre and Railway Station	J. Bartley.....	12	12	12 do.....	125 20
Tilsonburg and Railway Station....	W. Parker.....	1	12	12 do.....	140 85
do do.....	do.....	2	12	3 do (to June 30, '90)	29 64
do do.....	E. & C. Becker.....	2	12	9 do from do.....	141 00
Townsend Centre and Watertord..	D. Kitchen.....	3	3	12 do.....	75 00
Tupperville and Railway Station..	J. J. Sutor.....	30 yds	6	12 do.....	25 04
Turnerville and Railway Station...	W. Turner.....	1	6	12 do.....	25 00
Tuscarora and Railway Station.....	S. J. McKelvey.....	1	6	12 do.....	109 55
Tyrconnell and Wallacetown.....	W. Hall.....	4	6	12 do.....	105 00
Uttoxeter and Wanstead.....	N. K. Nesbitt.....	6	3	12 do.....	100 00



DETAIL of all payments for Mail Transportation in London Postal Division,  
&c.—*Concluded.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Vandear and Woodstock.....	N. Schooley.....	9	3	12 months .....	115 00
Vereker and Railway Station....	J. Bondy.....	3	6	9 do 25 dys.(from June 6, '90).....	135 20
Villa Nova and Railway Station...	M. McAlpine....	1	6	12 do .....	50 00
Vittoria and Railway Station.....	F. A. Finch.....	12	12	do .....	80 00
Vittoria and Walsh.....	S. Ottley.....	4	6	12 do .....	126 00
Wabuno and Railway Station....	B. D. Varnum....	4	6	12 do .....	148 00
Walkers and Railway Station.....	J. Greaves.....	12	12	do .....	30 00
Walkerville and Railway Station..	G. W. Busch....	10 yds	24	12 do .....	120 00
do do	do	125 yds	6	10 do (from June 1, '90)	24 58
(L. E. E. & D. R.).....	do	24	12	do .....	75 00
Wallaceburg and Railway Station..	J. B. McDougall	2	12	3 do (to June 30, '90)	39 00
Wallacetown and Railway Station..	C. McGregor....	2	12	9 do from do .....	112 50
do do	W. Hall.....	2	2	9 do (to Dec. 31, '90)	75 00
Walnut and Watford.....	P. E. Willoughby	6	6	3 do from do .....	25 00
do do	A. Black.....	8	6	12 do .....	195 00
Warwick and Railway Station....	J. Smith.....	1	12	3 do (to June 30, '90)	23 47
Waterford and Railway Station....	H. Dochstader..	1	12	9 do from do .....	54 75
do do	B. H. Rammage..	50 ft.	12	12 do .....	15 00
Weidman and Railway Station....	O. Jansohn.....	6	9	9 do (to Dec. 31, '90)	30 00
Weldon and Railway Station.....	J. E. Weldon....	1	6	3 do from do .....	10 00
do do	R. Warwick....	1	6	3 do .....	10 00
Whitebread Station and Railway Station.....	F. H. McDonald	50 yds	12	11 do (from May 1, '90)	36 67
Wilton Grove and Railway Station.	P. Murray.....	1	6	12 do .....	33 75
Windsor and Detroit, U.S.	S. D. Huff.....	2	24	12 do .....	500 00
Windsor and Railway Station (C.S.)	do .....	1	24	12 do .....	214 37
Windsor and Railway Station (L. E. E. & D. R.).....	J. Egan.....	1 1/2	6	4 do (to Sept. 30, '90)	31 20
do do	M. H. McCarthy	1 1/2	6	8 do from do .....	48 30
Windsor and Street Letter Boxes...	W. H. Offett....	1	12	do .....	300 00
Wolverton and Railway Station...	S. Clans.....	1	12	do .....	114 00
Woodslee and Railway Station....	J. P. Henry.....	1 1/2	12	do .....	156 50
Woodstock and Railway Station...	J. A. McKenzie..	1 & 3/4	12 & 24	do .....	315 65
Woodstock and Street Letter Boxes.	A. McCleneghan	3 1/2	18	3 do (to June 30, '90)	57 50
do do	R. Kerr.....	3 1/2	18	9 do from do .....	105 00
Wyton Station and Railway Station	G. Scatcherd....	1/8	12	do .....	20 00
Yarmouth Centre and Railway Station .....	G. A. Parlee....	1/2	6	12 do .....	100 00
Total.....					\$52,133 97

WILLIAM WHITE,

*Deputy Postmaster-General.*

W. H. SMITHSON,

*Accountant.*

## MANITOBA POSTAL DIVISION.

DETAIL of all payments for Mail Transportation in Manitoba Postal Division,  
made within the Year ended 30th June, 1891.

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Adelpha and Killarney.....	H. Mason.....	20	2	12 months.....	240 00
Aikenside and Chater.....	W. Curle.....	12½	1	12 do.....	122 20
Alameda and Coalfields.....	M. McKay.....	28	1	8 do (from Aug. 1, '90)	106 67
Alameda and Glen Ewen.....	T. Ewen.....	9	1	5 do (from Nov. 1, '90)	45 83
Alexander Station and R'y Station.	J. F. Walker...	8½	12	12 do.....	30 00
Almasippi and Campbellville.....	G. Gray.....	8	1	12 do.....	75 00
Alvena and Batoche.....	J. Caron.....	22	1	4 do 16 days (from Nov. 15, '90)...	49 10
Arden Station and Glenholm.....	J. Hockin.....	8	1	8 do (from Aug. 1, '90)	40 00
Arden Station and Railway Station.	M. E. Boughton.	36	8	12 do.....	50 00
Ardpatrick and Asessippi.....	R. H. Marshall.	9	Ftn'ly	9 do (to Dec. 31, '90).	82 50
Argyle and Stonewall.....	H. McLeod.....	9	1	12 do.....	80 00
Armstrong's Lake and R'y Station.	J. Sharp.....	13½	1	3 do (from Jan. 1, '91)	13 00
Arnaud and Dominion City.....	J. M. Martineau	9	2	12 do.....	208 00
Arrochar and Railway Station.....	R. McDonald...	4½	3	12 do.....	32 00
Arrow River and Beulah.....	J. Evans.....	22	1	12 do.....	180 00
Asessippi and Russell.....	W. Duncan.....	15	1	3 do (to June 30, '90).	75 00
do do.....	J. Muir.....	15	2	9 do from do	219 75
Asessippi and Tumbell.....	J. Edwards.....	14	Ftn'ly	3 do (from Jan. 1, '91)	9 00
Ash Creek and Moropano.....	R. Johnston.....	5	1	12 do.....	52 00
Assiniboine and Poplar Point.....	G. M. Jackson..	4	2	12 do.....	100 00
Aubigny and St. Agathe.....	A. Bernier.....	7	2	12 do.....	80 00
Austin and Railway Station.....	W. Clifford.....	12	4	do (to July 31, '90).	10 00
do do.....	E. C. Wheeler...	12	8	do from do	66 67
Aweme and Two Rivers.....	C. Bellhouse...	5	1	12 do.....	60 00
Baie St. Paul and Railway Station.	C. A. D. Tetu..	1½	12	9 do (to Dec. 31, '90).	60 00
Baie St. Paul and St. Eustache.....	J. H. Lavoie....	7	1	9 do do	60 00
Belcarres and Indian Head.....	J. Balfour.....	27	1	12 do.....	250 00
Balgonie and Davin.....	G. W. Elliott...	12	1	12 do.....	65 00
Balgonie and Loon Creek.....	B. Woolhouse...	31	1	7 do (to Oct. 31, '90)..	151 66
do do.....	do.....	37	1	5 do from do	130 00
Balgonie and Railway Station.....	P. Dickson.....	1½	12	12 do.....	80 00
Balmerino and Binscarth.....	A. Fletcher.....	4	2	6 do (to Sept. 30, '90).	40 00
do do.....	J. Fletcher.....	4	2	6 do from do	40 00
Balmoral and Pleasant Home.....	R. Rutherford...	18	1	12 do.....	148 00
Balmoral and Stonewall.....	do.....	8	2	2 do (to May 31, '90)..	21 33
do do.....	do.....	8	3	10 do from do	160 00
Barnsley and Railway Station.....	J. Glenn.....	4½	4	12 do.....	52 00
Batoche and Boucher.....	P. Parenteau...	23	1	12 do.....	125 00
Batoche and Saskatoon.....	J. Caron.....	55	Ftn'ly	7 do 14 days (to Nov. 14, '90).	155 57
Batoche and Stobart.....	A. Fisher.....	6	1	4 do 16 days (from Nov. 15, '90)..	29 46
Battleford, Fort Pitt and Swift Current, &c.....	Leeson & Scott.	90, 198 & 218	1	7 do 10 days (to Nov. 10, '90).....	12,266 07
Battleford and Onion Lake.....	do.....	102	Ftn'ly	4 do 20 days from do	684 77
Battleford and Saskatoon.....	do.....	90	2	4 do do do	2,739 23
Beausejour and Brokenhead.....	E. A. Dugard...	14	1	12 do.....	130 00
Belcourt and Reaburn.....	T. Brown.....	4	2	7 do (from Sept. 1, '90)	35 00
Bellevue and Virden.....	A. Mooney.....	35¾	1	3 do (to June 30, '90).	76 09
do do.....	do.....	42	1	9 do from do	267 27
Belses and Pipestone.....	F. A. Williams..	7½	1	1 do 7 days (to Sept. 7, '90).	5 26
do do.....	W. Crothers...	7½	1	6 do 23 days from do	33 75
Benbecula and Wapella.....	D. Miller.....	8	1	12 do.....	40 00
Bertha, Brandon and Minnewawa..	R. Crompton...	33 & 27	1	9 do (from July 1, '90)	429 00
Beulah and Elkhorn.....	G. W. Marsh....	25	2	12 do.....	468 00

DETAIL of all payments for Mail Transportation in Manitoba Postal Division,  
&c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per week.	Period.	Amount.
					\$ cts.
Binscarth and Binscarth Farm.....	J. Fletcher.....	6	2	12 months .....	100 00
Binscarth and Lidford.....	W. H. Gwillam.....	8	1	8 do (to Nov. 30, '90).....	40 00
do do .....	do .....	7	1	1 do (to Dec. 31, '90).....	4 37
do do .....	E. W. Ham.....	7	1	3 do from do .....	13 12
Binscarth and Railway Station.....	E. H. Williams.....	$\frac{1}{16}$	6	3 do (to June 30, '90, and arrears).....	20 83
do do .....	do .....	$\frac{1}{16}$	7	9 do from do .....	65 61
Binscarth and Spy Hill.....	H. V. Bailey.....	21	1	12 do .....	200 00
Binscarth Farm and Snake Creek.....	C. Hamilton.....	12 $\frac{1}{2}$	1	12 do .....	125 00
Birds Hill and Railway Station.....	G. Chudleigh.....	3	6	12 do .....	125 20
Birtle and Moosomin.....	G. F. Dunn.....	37	2	12 do .....	570 00
Birtle and Railway Station.....	W. G. Porteous.....	$\frac{1}{3}$	6	3 do (to June 30, '90).....	28 43
do do .....	do .....	$\frac{1}{3}$	8	9 do from do .....	97 50
Birtle and Seeburn.....	A. Swainson.....	20	1	12 do .....	130 00
Birtle and Warleigh.....	J. C. Dudley.....	8	1	12 do .....	60 00
Blackwood and Indian Head.....	J. A. O. Blackwood.....	13	1	4 do (to July 31, '90).....	24 66
Blythfield and Starbuck.....	W. H. Mellow.....	9	1	12 do .....	80 00
Boharm and Moose Jaw.....	B. Smith.....	11	1	9 do (from July 1, '90).....	56 25
Boissevain and Desford.....	A. McKnight.....	24	2	12 do .....	125 00
Boissevain and Heaslip.....	G. F. Brown.....	18 $\frac{1}{2}$	2	3 do (to June 30, '90).....	75 00
Boissevain and Langvale.....	H. Hammond.....	23	2	3 do (to June 30, '90).....	78 46
do do .....	G. F. Brown.....	32	2	9 do from do .....	381 00
Boissevain and Railway Station.....	A. McKnight.....	$\frac{1}{2}$	6	3 do (to June 30, '90).....	12 50
do do .....	do .....	$\frac{1}{2}$	12	9 do from do .....	75 00
Boissevain and Wapaha.....	J. Sheppard.....	14	1	12 do .....	145 60
Boscurvis and Moosomin.....	F. H. Stephenson.....	113	1	12 do .....	913 64
Bradwardine and Logoch.....	T. Levins.....	14	1	9 do (to Dec. 31, '90).....	67 50
do do .....	W. Beamish.....	14	1	3 do from do .....	27 50
Brandon and Minnewawa.....	R. Crompton.....	27	2	3 do (to June 30, '90).....	130 00
Brandon and Olivedale.....	D. Reed.....	12	2	5 do (to Aug. 31, '90).....	54 16
Brandon and Pendennis.....	W. J. Sargent.....	20	1	12 do .....	192 00
Brandon and Rapid City.....	A. Stewart.....	20	6	12 do .....	750 00
Brandon and Railway Station.....	A. Munroe.....	$\frac{1}{4}$	14	12 do .....	334 80
Brandon and Souris.....	R. B. Kirchoffer.....	25 $\frac{1}{2}$	6	2 do (to May 31, '90).....	141 67
do do .....	A. C. Douglas.....	25 $\frac{1}{2}$	2	1 do (to June 30, '90).....	70 83
do do .....	J. B. Roberts.....	25 $\frac{1}{2}$	3	8 do (to Feb. 28, '91).....	400 00
do do .....	do .....	26 $\frac{1}{2}$	3	1 do from do .....	52 45
Brandon and Two Rivers.....	W. Telford.....	32	2	6 do (to Sept. 30, '90).....	324 76
do do .....	J. Little.....	32	2	6 do from do .....	325 00
Bredenburg and Railway Station.....	J. J. Buchanan.....	$\frac{1}{2}$	1	6 do (to Dec. 31, '90).....	13 00
do do .....	do .....	1 $\frac{1}{2}$	1	3 do from do .....	6 50
Bridge Creek and Railway Station.....	J. Tortington.....	3 $\frac{1}{2}$	1	12 do .....	95 00
Brierwood and Roden.....	D. Aitken.....	6	1	12 do .....	50 00
Broadview and Railway Station.....	R. Clementson.....	$\frac{1}{2}$	12	6 do (to Sept. 30, '90).....	50 00
do do .....	J. Patterson.....	$\frac{1}{2}$	11	6 do from do .....	70 00
Brookdale and Carberry.....	H. Glass.....	20	1	12 do .....	90 00
Bru and Cypress River.....	W. Josephson.....	7 $\frac{1}{2}$	2	9 do (from July 1, '90).....	75 00
Burnbank and Two Creeks.....	A. Grant.....	6	1	8 do (from Aug. 1, '90).....	42 00
Burnside and Railway Station.....	W. A. McIntosh.....	5 $\frac{1}{2}$	2	12 do .....	180 00
Butterfield and Workman.....	W. A. W. Smith.....	23 $\frac{1}{2}$	1	9 do (to Dec. 31, '90).....	140 19
do do .....	A. A. Johnstone.....	23 $\frac{1}{2}$	1	3 do from do .....	59 50
Cadurcis and Minnedosa.....	W. A. Smith.....	6	2	12 do .....	156 00
Calf Mountain and Thornhill.....	F. Bolton.....	6	2	12 do .....	130 00
Calgary and Fort McLeod.....	W. H. Ford.....	102	1	12 do .....	1,200 00
Calgary and Fort Saskatchewan.....	Leeson & Scott.....	218	1	4 do 20 days (from Nov. 11, '90).....	3,317 51
Calgary and Railway Station.....	G. C. King.....	$\frac{1}{3}$	12	12 do .....	300 00
Calgary and Spring Bank.....	W. Mickle.....	12	1	3 do (from Jan. 1, '91).....	26 00
Camille and Railway Station.....	W. H. Smith.....	10	2	12 do .....	208 00
Carberry and Railway Station.....	M. Wise.....	$\frac{1}{2}$	14	12 do .....	175 00
Carberry and Wellwood.....	G. R. Black.....	14 $\frac{1}{2}$	2	12 do .....	229 00



DETAIL of all payments for Mail Transportation in Manitoba Postal Division,  
&c.—Continued.

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Carlingville and Oak River . . . . .	J. L. Fraser . . . . .	17	1	6 months 9 days, (to Oct. 9, '90).	91 78
do do . . . . .	do . . . . .	15	1	5 do 21 days, (from do	73 33
Carman and Pomeroy . . . . .	J. Sutton . . . . .	8	1	12 do . . . . .	80 00
Carman, Lintrathen and Roseisle . . . . .	J. Bruce . . . . .	113 26	1	12 do . . . . .	325 00
Carman and Salterville . . . . .	R. Squires . . . . .	4	2	12 do . . . . .	104 00
Carnduff and Sourisford . . . . .	J. D. Bride . . . . .	40	1	12 do . . . . .	396 00
Caron and Railway Station . . . . .	A. H. Powell . . . . .	1 3/4	6	12 do . . . . .	30 00
Carssdale and Lumsden Station . . . . .	E. Carss . . . . .	2	2	3 do (from Jan. 1, '91)	6 50
Carssdale and Regina . . . . .	do . . . . .	22	1	9 do (to Dec. 31, '90).	156 00
Cartwright and Railway Station . . . . .	T. S. Menary . . . . .	6	3	3 do (to June 30, '90).	13 00
do do . . . . .	do . . . . .	12	9	9 do from do . . . . .	78 00
Cash City and Poplar Grove . . . . .	C. G. Ross . . . . .	7	1	2 do 21 days (to June 21, '90).	23 42
do do . . . . .	L. M. Sage . . . . .	7	1	8 do 25 days (to Mar. 21, '91, broken period).	108 83
Castleavery and Shellmouth . . . . .	J. Dugan, jr . . . . .	14	1	12 do . . . . .	117 00
Chater and Railway Station . . . . .	P. Dickson . . . . .	30 1/2	12	12 do . . . . .	62 60
Churchbridge and Clumber . . . . .	W. Lister . . . . .	30	1	9 do (from July 1, '90)	108 75
Churchbridge and Railway Station . . . . .	B. D. Westman . . . . .	2	3	3 do (to June 30, '90).	12 50
do do . . . . .	do . . . . .	3	9	9 do from do . . . . .	56 25
Clandebye and Selkirk . . . . .	S. H. Ward . . . . .	8	2	12 do . . . . .	130 00
Clarkleigh and Lunder . . . . .	H. Johnson . . . . .	6	1	1 do (from Mar. 1, '91)	3 33
Clarkleigh and Lundyville . . . . .	J. Clark . . . . .	18	1	12 do . . . . .	130 00
Clarkleigh and Reaburn . . . . .	D. Boyer . . . . .	40	2	12 do . . . . .	409 00
Clarkleigh and Seamo . . . . .	T. Seaman . . . . .	5	1	12 do . . . . .	39 00
Clearwater and Railway Station . . . . .	R. Rogers . . . . .	1 1/2	6	3 do (to June 30, '90).	19 50
do do . . . . .	do . . . . .	12	9	9 do from do . . . . .	117 00
Cold Springs and Minnewakan . . . . .	W. A. Fidler . . . . .	6	1	4 do (from Dec. 1, '90)	11 00
Clumber and Whitewood Station . . . . .	F. G. Lyons . . . . .	46	1	3 do (to June 30, '90).	78 66
Cook's Creek and Winnipeg . . . . .	G. P. Bliss . . . . .	22	2	6 do (to Sept. 30, '90).	150 00
do do . . . . .	W. J. Buxton . . . . .	22	2	6 do from do . . . . .	182 00
Craigie Lea and Rosebery . . . . .	A. Kelso . . . . .	12	1	12 do . . . . .	104 00
Craven and Reynoldton . . . . .	L. H. Hoskins . . . . .	5	1	4 do (to Dec. 31, '90).	17 33
Craven and Tregarva . . . . .	do . . . . .	8 1/2	1	3 do from do . . . . .	18 75
Creelford and Neepawa . . . . .	W. R. Dunlop . . . . .	22	2	12 do . . . . .	365 00
Crescent Lake and Saltcoats . . . . .	D. J. O'Keefe . . . . .	18	1	9 do (to Dec. 31, '90).	101 25
do do . . . . .	E. Salisbury . . . . .	18	1	3 do from do . . . . .	33 75
Crewe and Fort Ellice . . . . .	J. Ellis . . . . .	6	2	12 do . . . . .	123 75
Crystal City and Railway Station . . . . .	R. Rollins . . . . .	6	3	3 do (to June 30, '90).	15 00
do do . . . . .	do . . . . .	12	9	9 do from do . . . . .	90 00
Cypress River and Railway Station . . . . .	A. Creighton . . . . .	8 1/2	4	12 do . . . . .	29 50
Cypress River and St. Alphonse . . . . .	D. Jeanotte . . . . .	8	2	12 do . . . . .	200 00
Dalton and Mail Catching Post . . . . .	J. McLeod . . . . .	1 3/4	12	12 do . . . . .	30 00
Daly and Virden . . . . .	A. Mooney . . . . .	13	1	12 do . . . . .	88 60
De Clare and Welwyn . . . . .	W. Ray . . . . .	7	1	12 do . . . . .	74 00
Deloraine and Railway Station . . . . .	R. D. Martin . . . . .	1 1/6	6	3 do (to June 30, '90).	12 50
do do . . . . .	do . . . . .	12 1/2	9	9 do from do . . . . .	75 00
Deloraine and Sourisford . . . . .	T. Cochlan . . . . .	28	2	12 do . . . . .	514 80
Deloraine and Waneche . . . . .	A. Stewart . . . . .	20	1	12 do . . . . .	156 00
Deloraine and West Brenda . . . . .	S. Leach . . . . .	32	1	12 do . . . . .	300 00
Dennington and Percy . . . . .	W. D. Kisbey . . . . .	26	1	9 do (to Dec. 31, '90).	141 00
do do . . . . .	R. C. Kisbey . . . . .	26	1	3 do from do . . . . .	62 50
Dominion City and Emerson . . . . .	C. Whitman . . . . .	10	3	12 do . . . . .	312 00
Donore and Railway Station . . . . .	C. Wheatland . . . . .	13 1/2	2	12 do . . . . .	57 20
Douglas Station and Madford . . . . .	A. Colquhoun . . . . .	25	2	9 do (from July 1, '90)	36 75
Douglas Station and Ry. Station . . . . .	T. E. Greenwood . . . . .	12 1/2	12	6 do 14 days, (to Oct. 14, '90).	32 28
do do . . . . .	do . . . . .	14	5	5 do 17 days, from do	27 72
Drumconnor and Railway Station . . . . .	E. Brown . . . . .	3 1/2	3	12 do . . . . .	54 95
Dunbow and Grierson . . . . .	J. Grierson . . . . .	10 1/2	1	2 do (from Feb. 1, '91)	17 33

DETAIL of all payments for Mail Transportation in Manitoba Postal Division,  
&c.—Continued.

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Dunbow and Harrisboro'.....	T. Harris.....	3	1	8 months 17 days, (from May 14, '90) ..	0 71
Dunbow and Okotoks.....	R. A. Begg.....	13½	1	10 do (to Jan. 31, '91) ..	137 50
Dunmore Junction and Josephsburg	J. H. Kern.....	23	1	4 do (to Sept. 30, '90) ..	60 00
do do .....	do .....	20½	1	6 do from do ..	80 20
Dunmore Junction and Railway Station .....	W. A. Killien ..	18	24	12 do .....	108 00
Edgeley Farm and Qu'Appelle Station .....	W. C. Cameron ..	8½	2	12 do .....	200 00
Edmonton and St. Albert.....	S. Moran.....	9	1	12 do .....	200 00
Elkhorn and Kola .....	J. T. Madge.....	15	1	12 do .....	104 00
Elkhorn and Lippentott.....	W. F. Longman ..	12	1	12 do .....	87 00
Elkhorn and Railway Station.....	J. McLeod.....	18	12	12 do .....	78 00
Elphinstone and Lake Dauphin.....	D. McIntosh.....	65	Ftn'ly	2 do (to May 31, '90) ..	52 00
Elphinstone and Strathclair Station	A. R. Sutherland ..	9½	2	12 do .....	123 76
Elva and Melita .....	J. A. A. Paisley ..	7	1	7 do (from Sept. 1, '90) ..	37 91
Emerson and Gretna.....	C. Whitman.....	18	6	12 do .....	858 00
Emerson and St. Joseph.....	Z. Robert.....	15½	2	12 do .....	300 00
Emerson and Stuartburn.....	J. H. Vanwhort.....	29½	1	12 do .....	338 00
Erinview and Stonewall.....	W. E. Crawford ..	27	1	11 do (to Feb. 28, '91) ..	173 25
do do .....	do .....	30	1	1 do from do ..	17 50
Esterhaz and Ohlen.....	J. Vass.....	7	1	3 do (to June 30, '90) ..	12 50
Eunola and Melita .....	J. A. A. Paisley ..	12	1	12 do .....	78 00
Fairfax and Souris .....	R. King.....	9	1	12 do .....	100 00
Fairmede and Wapella.....	H. A. Hall.....	16	1	12 do .....	125 00
Fannystelle and Railway Station.....	A. Veronneau.....	4	6	12 do .....	5 83
Fernton and Winnipeg.....	C. F. Bridgman ..	4	3	12 do .....	125 00
Fleming and Railway Station.....	B. B. Gilbert.....	18	12	12 do .....	100 00
Forest Farm and Whitewood Station	Taylor & Wilson ..	12	1	3 do (from Jan. 1, '91) ..	22 75
Fort Alexander and Peguis.....	M. Fontaine.....	50	Ftn'ly	12 do .....	182 00
Fort Francis and Rat Portage.....	F. B. Nicolle.....	160	Ftn'ly	5 do (to Aug. 31, '90) ..	341 67
do do .....	H. C. Ritson.....	160	Ftn'ly	7 do from do ..	554 16
Fort McLeod and Lethbridge.....	E. R. Cowen, Ex. ..	30	3	3 do (to June 30, '90) ..	187 50
do do .....	J. B. Smith.....	30	3	9 do from do ..	900 00
Fort McLeod and Pincher Creek.....	M. Brouillette.....	32	2	12 do .....	475 00
Fort Pelly and Wallace.....	J. C. Murray.....	49	Ftn'ly	12 do .....	182 00
Fort Saskatchewan and Pakan.....	Borwick & Erasmus ..	55	Ftn'ly	12 do .....	650 00
Fox Warren and Railway Station.....	A. Laycock.....	18	5	3 do (to June 30, '90) ..	7 50
do do .....	do .....	18	6	9 do from do ..	37
Geysir and Icelandic River.....	S. Eyolfson.....	10	Ftn'ly	9 do (from July 1, '90) ..	16
Gladstone and Golden Stream.....	D. McConnell.....	8	1	12 do .....	78
Gladstone and Mekiwin.....	J. McGregor.....	15	2	12 do .....	225 00
Gladstone and Plumias.....	J. L. Logie.....	20	1	12 do .....	200 00
Gladstone and Railway Station.....	do .....	14	8	12 do .....	100 00
Gladys and Okotoks.....	C. W. S. Harkness ..	7	1	12 do .....	75 00
Gleichen and Railway Station.....	V. J. Beaupre.....	18	12	12 do .....	60 00
Gleichen and Strangmuir.....	A. W. Strange.....	15	1	12 do .....	120 00
Glenboro' and Grund.....	S. Christopher-son ..	9½	2	12 do .....	156 00
Glenboro' and Railway Station.....	J. Duncan.....	18	4	12 do .....	32 50
Glenboro' and Stockton.....	A. F. Andrews.....	9	2	12 do .....	156 00
Glendinning, Pilot Mound and Roseberry .....	J. M. Fraser.....	29½, 22	1	9 do (to Dec. 31, '90) ..	337 50
do do .....	do .....	32½, 22	1	3 do from do ..	119 05
Glenora and Pasadena.....	G. Graham.....	5½	1	8 do (from Aug. 1, '90) ..	26 00
Gonor and Railway Station.....	J. Gunn.....	3½	2	12 do .....	100 00
Grande Clarière and Melgund.....	T. Gaboriault.....	8	1	7 do (from Sept. 1, '90) ..	30 33
Grandon and Stobart.....	J. Nolin.....	7	1	4 do 16 days (from Nov. 15, '90) ..	24 55
Grenfell and Railway Station.....	R. Routh.....	17	12	12 do .....	78 00
Gretna and Railway Station.....	J. R. Hoffman.....	17	14	12 do .....	219 00
Gretna and Reinland.....	W. Esau.....	17	2	12 do .....	165 00
Griswold and Railway Station.....	G. Lindsay.....	14	12	12 do .....	80 00

DETAIL of all payments for Mail Transportation in Manitoba Postal Division,  
&c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Griswold and Viola Dale.....	P. R. Brown....	42½	1	6 months 9 days (to Oct. 9, '90).....	298 95
do do .....	do .....	40½	1	2 do 22 days (to Dec. 31, '90).....	122 50
do do .....	W. Beamish....	40½	1	3 do from do .....	135 79
Gull Lake and Railway Station...	R. W. Caswell..	2½	12	12 do .....	25 00
Hanlan and Meadow Lea.....	J. Macdonald....	6½	1	11 do (to Feb. 28, '91)..	47 66
do do .....	do .....	8½	2	1 do from do .....	7 66
Harrowby and Railway Station...	S. Blane .....	3	3	3 do (to June 30, '90)..	9 37
do do .....	do .....	4	9	9 do from do .....	37 50
Haviland and Sheppardville.....	G. F. Brown....	8	2	4 do (to Oct. 31, '90)..	41 67
do do .....	do .....	11½	2	5 do from do .....	52 08
Hayward and Qu'Appelle.....	H. H. Hayward..	12	1	12 do .....	80 00
Hecla and Icelandic River.....	G. Arnason.....	24	Ftn'ly	7 do (to Oct. 31, '90)..	33 33
High Bluff and Railway Station...	J. A. K. Drummond.....	1	14	12 do .....	70 00
High River and Pekisko.....	M. G. Stinson....	25	Ftn'ly	12 do .....	52 00
Holland and Railway Station...	J. F. Holland....	4	9	9 do (to Dec. 31, '90)..	30 00
do do .....	J. R. Holland....	4	3	3 do from do .....	12 50
Holmfild and Railway Station...	T. S. Young.....	6	3	3 do (to June 30, '90)..	15 00
do do .....	do .....	12	9	9 do from do .....	86 00
Huns Valley and Minnedosa.....	M. Ruby.....	18	1	12 do .....	129 00
Icelandic River and Manigotagan..	T. Thorarinson..	44	Ftn'ly	5 do (from Nov. 1, '90)	62 50
Icelandic River and Peguis.....	S. Sigurdson....	60	Ftn'ly	1 do (to April 30, '90)..	28 75
Icelandic River and Selkirk.....	do .....	68	1	5 do (to Sept. 30, '90)	208 33
do do .....	F. Sigurdson....	68	1	6 do from do .....	250 00
Ignace and Railway Station.....	W. H. Cobb.....	12	12	12 do .....	80 00
Indianford and Treherne.....	H. Sturton.....	12	1	12 do .....	78 00
Indian Head and Kenlis.....	J. Glenn.....	19	1	8 do (from Aug. 1, '90)	83 33
Indian Head and Railway Station...	R. Crawford.....	12	12	12 do .....	200 00
Isle des Chenes and St. Boniface..	E. Genthon.....	19	1	3 do (from Jan. 1, '91)	31 25
Joly and St. Agathe.....	A. Lafrance....	15	2	4 do (to July 31, '90)..	41 67
Joly and Steinbach.....	J. Cadotte.....	36	1	12 do .....	120 00
Kalidea and Manitou.....	N. Morrison....	13½	1	12 do .....	85 00
Kaministiquia and Railway Station.	F. W. Whitfield..	12	12	12 do .....	25 00
Keewatin and Railway Station....	J. A. Fletcher....	12	12	12 do .....	295 00
Kelroe Station and Railway Station.	C. F. Nixon.....	4	12	12 do .....	52 00
Kemnay and Railway Station.....	J. A. Scott.....	16	6	12 do .....	30 00
Killarney and Railway Station....	C. Bate.....	6	3	3 do (to June 30, '90)..	13 00
do do .....	do .....	12	9	9 do from do .....	78 00
Killarney and Rowland.....	J. Russell.....	16½	2	12 do .....	234 00
Kinbrae and Riversdale.....	J. P. Minihnick..	9	1	3 do (to June 30, '90)..	13 75
Kinistino and Prince Albert.....	R. Pritchard....	48½	1	12 do .....	525 00
Kinosota and Westbourne.....	C. Anderson.....	65	Ft'ly	12 do .....	248 00
Kirkpatrick and Loughby.....	J. Smith.....	10	1	4 do 16 days (from Nov. 15, '90).....	39 23
Kutawa and Qu'Appelle Station...	Leeson & Scott..	72	Ft'ly	3 do 3 days (to Feb. 13, '91).....	367 69
Kutawa and Qu'Appelle.....	do .....	54	1	1 do 15 days from do ..	204 44
LaBroquerie and Winnipeg.....	J. B. Desautels..	47	2	12 do .....	574 00
Lake Dauphin and Strathclair Sta'n	D. McIntosh....	75	Ft'ly	10 do (from June 1, '90)	260 00
Langdon and Railway Station.....	J. Hastings.....	2	4	4 do (from Dec. 1, '90)	10 00
Langenburg and Railway Station...	P. Ulrich.....	3	3	3 do (to June 30, '90)..	9 37
do do .....	do .....	4	9	9 do from do .....	37 50
Langvale and Ninette.....	J. Overend.....	8	1	12 do .....	104 00
Larivière and Railway Station....	W. H. Swales....	6	3	3 do (to June 30, '90)..	13 00
do do .....	do .....	12	9	9 do from do .....	78 00
Larivière and Silver Spring.....	R. Armstrong....	3½	2	3 do (from Jan. 1, '91)	32 50
Lebret and Qu'Appelle.....	J. P. Magnon....	4½	2	12 do .....	104 00



DETAIL of all payments for Mail Transportation in Manitoba Postal Division,  
&c.—Continued.

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Lennox and Montefiore.....	H. Mantz.....	8	2	12 months.....	130 00
Lethbridge and Railway Station.....	J. D. Higinbotham.....	5 <sup>1</sup> / <sub>2</sub>	12	12 do	250 00
Lower Fort Garry and Piegon Bluff.....	J. E. Harriott.....	26	1	1 do (from Mar. 1, '91)	2 50
Lumsden Station and Marieton.....	A. Jamieson.....	26	1	3 do (from Jan. 1, '91)	78 00
Lyleton and Sourisford.....	J. W. Henderson.....	12	1	10 do (from June 1, '90)	43 33
McGregor Station and Ry. Station.....	J. Watson.....	1	8	1 do (to April 30, '90).	3 33
do do.....	M. Gray.....	1	12	11 do from do	91 67
McGregor Station and Rosehill.....	E. C. Hamblin.....	10	1	12 do	45 00
McGregor Station and Wellington.....	F. Atkinson.....	12 <sup>1</sup> / <sub>2</sub>	1	12 do	104 00
Manigotagan and Selkirk.....	S. Jonasson.....	75	4	do (to Oct. 31, '90).	20 00
Manitou, Mowbray and Windygates.....	J. Shields.....	26 & 33 <sup>1</sup> / <sub>2</sub>	1	3 do (to June 30, '90)..	158 75
do do.....	R. F. Handford.....	26 & 33 <sup>1</sup> / <sub>2</sub>	1	9 do from do	431 25
Manitou and Mussellboro'.....	W. Pole.....	15	1	12 do	128 00
Manitou and Norquay.....	G. Moorhead.....	44	2	12 do	640 00
Manitou and Railway Station.....	W. C. Kennedy.....	1	12	12 do	150 00
Maple Creek and Railway Station.....	J. Dixon.....	4	12	12 do	156 00
Marieton and Regina.....	S. Beach.....	41	1	7 do (to Oct. 31, '90)..	264 27
do do.....	J. A. Whitmore.....	41	1	2 do (to Dec. 31, '90)..	100 00
Marieton and Strassburg.....	A. Christoph.....	16	1	12 do	125 00
Marlborough and Moose Jaw.....	J. G. Beesley.....	14	1	12 do	104 00
Marney and Newdale.....	S. B. Baxter.....	7	1	12 do	46 80
Marquette and Railway Station.....	W. A. Moore.....	1	12	3 do (from Jan. 1, '91)	20 00
Marquette and St. Eustache.....	J. H. Lavoie.....	7	1	3 do do	20 00
Marringhurst and Otenaw.....	W. Playfair.....	15	1	12 do	124 80
Medicine Hat and Railway Station.....	T. Tweed.....	1	12	12 do	181 80
Medora and Princess.....	W. Cosgrove.....	5	1	12 do	52 00
Melgund and Souris.....	W. A. Dolnaga.....	20	2	9 do (to Dec. 31, '90)..	300 00
do do.....	J. H. Hartney.....	20	2	3 do from do	86 25
Menota and Napinka.....	F. B. Warren.....	6	1	12 do	75 00
Miami and Morden.....	J. G. Blair.....	19 <sup>1</sup> / <sub>2</sub>	2	12 do	217 80
Millbrook and Queen's Valley.....	J. Davies.....	7	1	12 do	46 80
Minnedosa and Railway Station.....	T. Boyd.....	3	8	12 do	78 25
Minnedosa and Scandinavia.....	C. A. Johnson.....	20	1	12 do	200 00
Moffat and Wolseley.....	E. A. Banbury.....	9	2	12 do	124 00
Moline and Rapid City.....	D. McNaught.....	8	1	12 do	117 00
Montgomery & Whitewood Station.....	T. E. O'Donohoe.....	20	1	12 do	182 00
Moose Jaw and Point Elma.....	D. Taylor.....	15	1	3 do (from Jan. 1, '91)	18 75
Moose Jaw and Railway Station.....	C. A. Gass.....	1	12	12 do	156 00
Moosomin and Redpath.....	J. Deavitt.....	41	1	9 do (to Dec. 31, '90)..	186 75
do do.....	do do.....	42	1	3 do from do	85 00
Moosomin and Railway Station.....	J. Daniel.....	1	12	12 do	125 00
Morden and Roland.....	W. H. Lowe.....	18	1	12 do	180 00
Morden and Railway Station.....	J. H. Dunsford.....	1	12	12 do	125 20
Morden and Stodderville.....	J. Stodders.....	10	2	12 do	194 20
Morris and Railway Station.....	W. A. Russell.....	1	12	9 do (to Dec. 31, '90)..	45 00
do do.....	G. F. Birney.....	4	12	3 do from do	15 00
Morris and St. Jean Baptiste.....	P. Parenteau.....	6	3	12 do	135 00
Neepawa and Oberon.....	S. Farrell.....	13	2	12 do	208 00
Neepawa and Orange Ridge.....	S. Chatwin.....	20	1	12 do	171 84
Neepawa and Railway Station.....	A. M. Dalton.....	3	8	12 do	109 55
Neepawa and Salisbury.....	E. Jasper.....	7	2	9 do (to Dec. 31, '90)..	93 00
do do.....	D. Hamilton.....	7	2	3 do from do	30 00
Nelson and Opawaka.....	P. Angers.....	8 <sup>1</sup> / <sub>2</sub>	1	12 do	75 40
Newdale and Railway Station.....	J. L. Cook.....	1	8	12 do	67 00
Newdale and Raven's Glen.....	C. A. Rea.....	7	1	12 do	52 00
Ninga and Railway Station.....	W. McKnight.....	1	3	3 do (to June 30, '90)..	7 50
do do.....	do do.....	4	6	5 do (to Nov. 30, '90)..	25 00
do do.....	do do.....	4	12	4 do from do	30 00
Niverville and Royal.....	W. Gallie.....	9 <sup>1</sup> / <sub>2</sub>	2	4 do (to July 31, '90)..	52 00

DETAIL of all payments for Mail Transportation in Manitoba Postal Division,  
&c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Norman and Railway Station.....	J. B. Davis.....	100 yds	7	12 months.....	178 84
Oak Bluff and Railway Station (La Salle).....	W. West.....	7	1	1 do (from Mar. 1, '91)	5 83
Oakburn and Shoal Lake.....	J. A. Hamilton.....	9	2	12 do	156 00
Oak Lake and Railway Station.....	G. D. Miller.....	12	12	12 do	78 00
Oakland and Portage la Prairie.....	T. Huddlestone.....	14	1	12 do	125 00
Oak River and Totouka.....	J. H. Stewart.....	8	1	6 do 9 days (to Oct. 9, '90)	47 20
do do.....	do.....	10	1	5 do 22 days from do	53 49
Olivedale and Rounthwaite.....	D. Reed.....	5	2	7 do (from Sept. 1, '90)	60 66
Orrwold and Raven Lake.....	A. H. Scouten.....	12	1	7 do (to Oct. 31, '90)	55 41
Orrwold and Shoal Lake.....	M. W. Thompson.....	16½	2	5 do from do	92 08
Ossowo and Poplar Point.....	F. Wagner.....	7	2	12 do	159 00
Parkin and Wapella.....	W. Archibald.....	12	1	12 do	75 00
Parklands and Qu'Appelle.....	T. Murray.....	11	1	12 do	70 00
Pasqua and Railway Station.....	H. N. Rorison.....	1½	6	9 do (to Dec. 31, '90)	54 00
do do.....	D. Robb.....	1½	6	3 do from do	21 00
Peguis and Poplar Park.....	J. Morrey.....	8	1	3 do (to June 30, '90)	14 30
Peguis and Selkirk.....	D. McIvor.....	6½	2	12 do	98 00
Penrith and Virden.....	W. F. Scarth.....	18	1	12 do	166 64
Pense and Railway Station.....	A. Blair.....	12½	12	12 do	78 00
Pheasant Forks and Wolseley.....	J. Franks.....	39½	2	12 do	374 00
Pigeon Lake and Winnipeg.....	T. Faulds.....	25	2	12 do	465 00
Pilot Mound and Railway Station.....	J. M. Fraser.....	1½	6	3 do (to June 30, '90)	15 00
do do.....	do.....	1½	12	9 do from do	90 00
Plumas and Tupper.....	G. Saunders.....	5	1	12 do	25 00
Plum Coulee and Railway Station.....	J. I. Borgen.....	1½	6	8 do (from Aug. 1, '90)	33 33
Poplar Park and Selkirk.....	D. Morrison.....	15	1	9 do (from July 1, '90)	48 75
Poplar Point and Railway Station.....	G. M. Jackson.....	3½	12	12 do	84 00
Portage la Prairie and Railway Stations.....	W. W. Miller.....	1¾	12 & 14	12 do	450 11
Portage la Prairie—C.P. Ry. & M. & N. W. Ry. (Transfer).....	do.....	150 yds.	6	do (to Sept. 30, '90)	25 00
Prince Albert and Qu'Appelle Station.....	Leeson & Scott.....	253	1	7 do 10 days (to Nov. 10, '90)	4,830 16
Prince Albert and Railway Station.....	J. M. Campbell.....	1	4	4 do 20 dys. from do	40 41
Qu'Appelle and Qu'Appelle Station.....	R. Johnston.....	18	6	9 do (to Dec. 31, '90)	352 50
do do.....	Leeson & Scott.....	18	6	3 do from do	162 50
Qu'Appelle Station and Railway Station.....	E. W. Warner.....	1½	12	12 do	140 40
Rathwell and Railway Station.....	T. Adair.....	1½	4	12 do	39 00
Rat Portage and Railway Station.....	W. Oliver.....	24	12	3 do	272 50
Raven Lake and Shoal Lake.....	A. H. Scouten.....	4½	2	7 do (to Oct. 31, '90)	75 83
Reburn and Railway Station.....	W. J. Paterson.....	14	12	12 do	182 75
Reburn and Woodlands.....	M. Slater.....	13	2	12 do	150 00
Regina and Railway Station.....	J. Whitmore.....	12	12	12 do	312 00
do do (Prince Albert Branch).....	do.....	¾	4	4 do 20 dys. (from Nov. 11, '90)	40 41
Regina and Wascana.....	C. Martin.....	13½	1	3 do (from Jan. 1, '91)	28 60
Reinland and Schauenfeldt.....	B. Loewen.....	9	1	12 do	70 00
Richland and Winnipeg.....	P. Blondin.....	37½	2	12 do	500 00
Rosburn and Solsgrith.....	R. R. Ross.....	16	2	3 do 11 days (to July 11, '90)	60 76
do do.....	J. Broadfoot.....	16	2	8 do 20 days (from do)	187 22
Rosser and Railway Station.....	P. E. Todd.....	1½	12	3 do (to June 30, '90)	7 50
do do.....	H. J. Beachell.....	1½	12	9 do from do	37 50
Rounthwaite and Strathorne.....	G. Stewart.....	4	2	12 do	100 00
Routledge and Railway Station.....	R. E. Campion.....	1½	6	12 do	32 00

DETAIL of all payments for Mail Transportation in Manitoba Postal Division,  
&c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Russell and Railway Station.....	J. DuPre.....	13	4	4 months (to July 31, '90)	14 16
do do.....	do.....	13	5	5 do (to Dec. 31, '90)...	53 08
do do.....	A. Clee.....	13	5	3 do from do.....	25 00
Russell and Shellmouth.....	J. G. Langford..	13	2	2 do (to May 31, '90)...	49 83
do do.....	R. Yeates.....	13	2	10 do from do.....	281 66
St. Agathe and Winnipeg.....	A. Bernier.....	25 1/2	2	10 do (to Jan. 31, '91)...	237 50
do do.....	do.....	25 1/2	2	2 do from do.....	48 19
St. Boniface and Winnipeg.....	M. Petrin.....	1	12	12 do.....	350 00
St. Malo and Winnipeg.....	A. Lafrance.....	45	2	2 do (to Sept. 30, '90)...	86 67
do do.....	E. Vinette.....	45	2	5 do 14 days (to Mar. 14, '91).....	247 81
do do.....	N. H. Houde.....	41	2	17 days from do.....	32 26
Saltcoats and Railway Station.....	W. Walley.....	1 1/2	2	3 months (to June 30, '90)	10 00
do do.....	do.....	1 1/2	3	9 do from do.....	45 00
Saltcoats and Wallace.....	J. Sharp.....	32	1	9 do (to Dec. 31, '90)...	234 00
do do.....	W. Wright.....	20	1	2 do (to Feb. 28, '91)...	25 00
Saskatchewan and Railway Station.	R. J. Molloy.....	5	1	4 do 16 days (from Nov. 15, '90)...	29 46
Saskatchewan Landing and Swift Current.....	Lesson & Scott..	30	1	4 do 20 days (from Nov. 11, '90)...	456 52
Saskatoon and Railway Station....	do.....	1	4	4 do 20 days from do.....	40 41
Selkirk and East Selkirk Railway Station.....	H. B. Hodgins..	2 1/2	12	12 do.....	149 00
Selkirk and Winnipeg.....	Peebles & Braden	22 1/2	3	12 do.....	600 00
Sewell and Railway Station.....	D. A. McVicar..	12	12	12 do.....	30 00
Shadeland and Thornhill.....	H. C. Sweet.....	3 1/2	2	12 do.....	160 00
Shoal Lake and Railway Station....	J. T. Dandridge.	6	12	12 do.....	78 00
Sidney and Railway Station.....	T. Babb.....	2	12	12 do.....	52 00
Silver Spring and Railway Station..	R. Armstrong....	3 1/2	2	9 do (to Dec. 31, '90)...	97 50
Sintaluta and Railway Station.....	C. G. Booth.....	1 1/2	3	9 do.....	75 00
do do.....	J. R. Carphin....	1 1/2	3	3 do from do.....	25 00
Solsgrith and Railway Station.....	J. C. Anderson..	8	12	12 do.....	50 00
Starbuck and Railway Station.....	J. Powers.....	2	12	12 do.....	60 00
Stobart and Railway Station.....	A. Fisher.....	8	4	4 do 20 days (from Nov. 11, '90)...	14 14
Stobart and Wingard.....	do.....	19	1	12 do.....	153 00
Stonewall and Railway Station.....	A. J. Bell.....	1 1/2	6	12 do.....	39 00
Stonewall and Wavy Bank.....	G. Vincent.....	8	1	12 do.....	70 00
Stony Mountain and Ry. Station....	A. Perry.....	1	12	12 do.....	100 00
Strathclair Station and Ry. Station.	W. L. McInnes..	1 1/2	8	12 do.....	40 30
Summerberry and Railway Station..	J. Linnell.....	1 1/2	6	12 do.....	70 00
Summer and Whitewood Station....	T. G. Lyons.....	40	1	6 do (to Dec. 31, '90)...	136 80
do do.....	F. W. Chamberlain	30	1	3 do from do.....	69 82
Swift Current and Railway Station.	W. G. Knight....	1 1/2	12	12 do.....	96 00
Taché Station and Railway Station.	J. McDonald....	1 1/2	12	12 do.....	25 00
Thornhill and Railway Station.....	W. Bradley.....	1 1/2	12	12 do.....	39 00
Touchwood Hills and Wishart.....	J. Hall.....	10	1	7 do 14 days (to Nov. 14, '90)...	49 79
do do.....	do.....	10	F't'y.	2 do 29 days (to Feb. 13, '91).....	9 99
do do.....	do.....	10	1	1 do 15 days from do.....	10 22
Turtle Mountain and Ry. Station...	P. S. Keller.....	4	3	11 do (to Feb. 28, '91)...	143 00
do do.....	do.....	4	3	1 do from do.....	13 00
Vermillion Bay and Railway Station	J. A. Crawford..	1 1/2	12	12 do.....	24 00
Verden and Railway Station.....	W. F. Scarth....	1 1/2	12	12 do.....	78 00
Wallace and Yorkton.....	W. J. Mann.....	14	1	1 do (from Mar. 1, '91)	8 66
Wapella and Railway Station.....	E. P. Benoit....	1 1/2	12	12 do.....	96 00
Westbourne and Railway Station...	Smalley & Chandler.	1 1/2	12	12 do.....	100 00



DETAIL of all payments for Mail Transportation in Manitoba Postal Division,  
&c.—*Concluded.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Whitemouth and Railway Station..	J. S. Corregan..	12	12	12 months .....	133 00
Whitewater and Railway Station..	F. D. Peters ...	6	3	do (to June 30, '90).	10 00
do do	do .....	12	9	do from do ..	60 00
Whitewood Station and Ry. Station	T. G. Lyons ....	12	12	do .....	78 00
Willoughby and Railway Station...	A. Cameron ....	1	1	4 do 16 dys (from Nov. 15, '90)....	19 64
Winnipeg and Railway Station.....	J. Sheppard ....	12	74	12 do .....	1,063 16
Winnipeg—Transferring Mails at Railway Station.....	do .....	12	12	do .....	440 00
Winnipeg and Custom House.....	do .....	12	6	12 do .....	125 00
Winnipeg and Street Letter Boxes..	C. H. Robinson..	26	21	12 do .....	696 00
Wolseley and Railway Station.....	J. P. Dill .....	12	12	12 do .....	200 00
Wood Bay and Railway Station.....	M. Campbell ....	12	3	12 do .....	65 00
Woodlands and Woonona.....	J. Hallett .....	6	1	12 do .....	52 00
Woodside and Railway Station.....	N. Morrison ....	12	1	12 do .....	30 00
Yorkton and Railway Station.....	J. Reaman ....	12	4	3 do (from Jan. 1, '91).	13 00
				Total.. ..	\$81,261 91

WILLIAM WHITE,  
*Deputy Postmaster-General.*

W. H. SMITHSON,  
*Accountant.*

## MONTREAL POSTAL DIVISION.

DETAIL of all payments for Mail Transportation in Montreal Postal Division,  
made within the Year ended 30th June, 1891.

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Abercorn and Railway Station.....	E. R. Shepard..	3 <sup>1</sup> / <sub>2</sub>	12	12 months.....	75 00
Abbotsford and Pauline.....	A. Lasnier.....	3	3	12 do .....	60 00
Abbotsford and Railway Station.....	D. Sharkey.....	1 <sup>1</sup> / <sub>2</sub>	12	12 do .....	60 00
Acton Vale and Railway Station.....	C. P. Ry. Co.....	1 <sup>1</sup> / <sub>2</sub>	12	do .....	40 00
Acton Vale and Ste. Christine.....	F. X. Legrand..	9	3	4 do (from Dec. 1, '90)	33 33
Acton Vale and St. Théodore d'Ac- ton.....	A. Fortier.....	4	6	12 do .....	100 00
Adamsville and Railway Station.....	D. Larivé.....	3 <sup>1</sup> / <sub>2</sub>	12	12 do .....	80 00
Agnes and Piopolis.....	H. Ryan.....	11	6	22 days (to June 30, '90).	24 17
Agnes and Railway Station.....	J. S. Wilson.....	11 <sup>1</sup> / <sub>2</sub>	12	12 months.....	36 00
Agnes and Ste. Cécile de Whitton.....	A. Loubier.....	9	3	12 do .....	96 00
Aird, Clarenceville and Miranda.....	M. J. Burwort..	6 & 4	3	12 do .....	96 00
Allan's Corners and Cairnside.....	J. Bryson.....	4	2	12 do .....	52 00
Allan's Corners and Railway Station.....	do.....	1	6	12 do .....	40 00
Anderson's Corners and Dewittville.....	J. Anderson.....	4	2	12 do .....	75 00
Ange Gardien de Rouville and Rail- way Station.....	P. Lajoie.....	1 <sup>1</sup> / <sub>2</sub>	12	12 do .....	50 00
Angeline and St. Alphonse de Granby.....	A. Côté.....	4	3	12 do .....	75 00
Antoinette and Lost River.....	C. Boon.....	22	2	12 do .....	150 00
Antoinette and St. Jovite.....	do.....	7	2	12 do .....	56 00
Armstrong Railway Station and Sorel.....	S. Valois.....	1 <sup>1</sup> / <sub>2</sub>	12	9 do 5 days (to Feb. 24, '91).....	57 42
Ascot Corner and Railway Station.....	A. Stacey.....	1 <sup>1</sup> / <sub>2</sub>	12	12 do .....	50 00
Ascot Corner and Westbury.....	J. P. Woodrow..	4	3	12 do .....	50 00
Athelstan and Powerscourt.....	A. Montgomery..	2	3	12 do .....	50 00
Avoca and Pointe au Chêne.....	J. McCallum.....	7	3	12 do .....	108 00
Ayer's Flat and Kingscroft.....	C. E. Cartier.....	6	2	11 do (to Feb. 28, '91).	67 83
do.....	do.....	6	3	1 do from do ..	9 25
Ayer's Flat and Railway Station.....	H. G. Ayer.....	1 <sup>1</sup> / <sub>2</sub>	12	12 do .....	40 00
Baldwin's Mills and Barnston.....	W. K. Baldwin..	5	3	12 do .....	84 00
Beaconsfield Railway Station and Ste. Geneviève.....	A. Legault.....	3	6	3 do (from Jan. 1, '91)	32 50
Beauharnois and Laberge.....	C. Primeau.....	5	2	12 do .....	50 00
Beauharnois and Melocheville.....	J. B. LeBœuf.....	3	6	12 do .....	90 00
Beauharnois and Railway Station.....	O. Duquette.....	1 <sup>1</sup> / <sub>2</sub>	24	12 do .....	125 00
Beauharnois and St. Étienne de Beauharnois.....	do.....	5	6	12 do .....	162 00
Beauvoir and Ste. Marthe.....	J. E. Poirier.....	3 <sup>1</sup> / <sub>2</sub>	3	12 do .....	50 00
Bedford and Pearceton.....	J. Briggs.....	8 <sup>1</sup> / <sub>2</sub>	6	12 do .....	210 00
Beebe Plain and Railway Station.....	C. H. McClin- tock.....	1 <sup>1</sup> / <sub>2</sub>	12	12 do .....	75 00
Belœil Village and St. Hilaire Sta- tion.....	P. Authier.....	1	12	12 do .....	150 00
Béranger and Dunham.....	S. Cook.....	4	2	12 do .....	50 00
Berthier and Sorel.....	S. Valois.....	5	14 & 7	12 do .....	444 00
Birchton and Railway Station.....	R. Bridgette.....	1 <sup>1</sup> / <sub>2</sub>	12	12 do .....	26 00
Birchton and Sand Hill.....	C. F. Caswell.....	4	3	12 do .....	54 00
Blue Bonnets and Railway Station.....	A. Doré.....	1 <sup>1</sup> / <sub>2</sub>	6	12 do .....	52 00
Bois de Filion and Ste. Thérèse.....	O. Chapleau.....	4	2	12 do .....	40 00
Bolton Centre, Knowlton and Knowl- ton Landing.....	G. Bice.....	9	6	12 do .....	475 00
Bolton Forest and Eastman.....	C. J. Fortin.....	2	3	12 do .....	50 00
Bordeaux and Railway Station.....	G. Picard.....	1 <sup>1</sup> / <sub>2</sub>	12	12 do .....	10 00
Bordeaux and Sault au Récollet.....	J. B. Prevost.....	2 <sup>1</sup> / <sub>2</sub>	6	12 do .....	120 00
Boscobel and Roxton Falls.....	J. Hackwell.....	8	1	12 do .....	30 00
Botreaux and Ormstown.....	O. Bergevin.....	4 <sup>1</sup> / <sub>2</sub>	2	12 do .....	42 00
Boucherville and Railway Station.....	A. Bemeur.....	133 yds	12	9 do 5 days (to Feb. 24, '91).....	55 50

DETAIL of all payments for Mail Transportation in the Montreal Postal Division, &c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Boulogne and St. Eugène de Grantham.....	G. Tanguay.....	41 <sup>3</sup> / <sub>4</sub>	3	12 months.....	72 00
Boytnton and Fairfax.....	R. Towle.....	4 <sup>1</sup> / <sub>4</sub>	3	9 do (to Dec. 31, '90)	56 25
do do.....	V. W. Eaton.....	4 <sup>1</sup> / <sub>4</sub>	3	3 do from do	20 00
Boytnton and Railway Station.....	J. Crosbie.....	4 <sup>1</sup> / <sub>4</sub>	12	9 do (to Dec. 31, '90)	37 50
do do.....	A. W. Brown.....	4 <sup>1</sup> / <sub>4</sub>	12	3 do from do	12 50
Brigham and Farnham Centre.....	P. E. O'Connor.....	2	6	12 do	98 00
Brigham and Railway Station.....	J. Harrison.....	3 <sup>1</sup> / <sub>4</sub>	12	12 do	48 00
Britannia Mills and Railway Station.....	H. Guilbert.....	60 yds.	12	12 do	20 00
Britonville and St. Sauveur.....	J. Hamilton.....	8	3	12 do	100 00
Brome and Railway Station.....	E. S. Chapman.....	1 <sup>3</sup> / <sub>4</sub>	6	12 do	60 00
Brompton and Brompton Falls.....	H. Addison.....	4	3	12 do	80 00
Brookbury and Robinson.....	R. Rowe.....	5	2	12 do	48 00
Brosseau and Railway Station.....	A. Lefebvre.....	3 <sup>3</sup> / <sub>4</sub>	12	12 do	26 00
Brownsburg and Mount Maple.....	J. Warwick.....	3 <sup>1</sup> / <sub>4</sub>	1	12 do	24 00
Bulwer and Railway Station.....	A. Sanborn.....	30 yds.	12	12 do	20 00
Calumet and Railway Station.....	H. Burch.....	100 yds	12	12 do	26 00
Canaan, Vt., East Clifton and Sawyerville.....	W. W. Sawyer.....	28 & 6	2 & 1	12 do	250 00
Canterbury and Scotstown.....	R. Groom.....	4	2	12 do	42 00
Capelton and Eustis.....	J. Blue.....	1	12	12 do	52 00
Capelton and Railway Station.....	S. L. Spafford.....	1 <sup>1</sup> / <sub>3</sub>	12	6 do (to Sept. 30, '90)	20 00
do do.....	do.....	1 <sup>1</sup> / <sub>3</sub>	24	6 do from do	40 00
Carillon and Lachute.....	M. Campeau.....	10 <sup>1</sup> / <sub>2</sub>	6	12 do	320 00
Carillon and Point Fortune.....	J. Larocque.....	1	12	4 do 22 days (to Oct. 4, '90)	37 20
Carillon and Rigaud.....	O. Clermont.....	8	6	2 do (from Feb. 1, '91)	59 50
Carillon and Vaudreuil Station.....	D. Rochon.....	25 <sup>1</sup> / <sub>2</sub>	6	4 do 19 days (broken period)	521 25
Carmel and Drummondville.....	F. Dionne.....	9	6	12 do	200 00
Cedars and Railway Station.....	E. Bissonnette.....	3	12	12 do	180 00
Chambly Basin and Railway Station.....	G. E. Mayrand.....	4 <sup>1</sup> / <sub>4</sub>	12	12 do	80 00
Chambly Canton & Railway Station.....	M. Hackett.....	4 <sup>1</sup> / <sub>4</sub>	12	3 do (to June 30, '90)	20 00
do do.....	P. Ulric.....	4 <sup>1</sup> / <sub>4</sub>	12	9 do from do	60 00
Channell and Millington.....	I. Thomson.....	3 <sup>3</sup> / <sub>4</sub>	3	12 do	60 00
Charlemagne and Montreal.....	M. Archambault.....	16 <sup>1</sup> / <sub>2</sub>	6	12 do	500 00
Chartierville and La Patrie.....	A. Labbé.....	9	2	12 do	75 00
Chatboro' and St. Philippe d'Argenteuil.....	W. Douglas.....	2 <sup>1</sup> / <sub>2</sub>	3	3 do (to June 30, '90)	9 75
do do.....	J. Donaldson.....	2 <sup>1</sup> / <sub>2</sub>	3	9 do from do	29 25
Chateaugay and Caughnawaga Railway Station.....	A. Desparois.....	7 <sup>1</sup> / <sub>2</sub>	6	12 do	200 00
Cherry River and Magog.....	R. A. Buzzell.....	4	3	3 do (to June 30, '90)	25 00
do do.....	G. S. Buzzell.....	4	3	9 do from do	45 00
Clarenceville and Lacolle Railway Station.....	M. J. Burwort.....	4	6	12 do	240 00
Clarenceville and Wolfe Ridge.....	do.....	4	3	12 do	40 00
Coaticook and Canaan, U.S.....	M. Trihey.....	19	2	12 do	200 00
Coaticook, Compton and St. Edwidge.....	G. Boulay.....	9 & 10	3	9 do (to Dec. 31, '90)	225 00
Coaticook and St. Edwidge.....	do.....	9	6	3 do from do	75 00
Coaticook and North Coaticook.....	J. Meade.....	1 <sup>1</sup> / <sub>2</sub>	12	12 do	79 72
Coaticook and Rock Island.....	H. A. Channelle.....	20	6	12 do	450 00
Coaticook and St. Malo.....	C. Breault.....	30	2	12 do	380 00
Como and Hudson Railway Station.....	A. Armsbury.....	1 <sup>1</sup> / <sub>2</sub>	12	2 do (from Feb. 1, '91)	16 66
Como and Oka.....	C. Chaurette.....	1	6	6 do 19 days (to Mar. 31, '91; broken period)	66 15
Compton and Martinville.....	J. Parsons.....	6	6	1 do (to April 30, '90)	15 00
do do.....	F. Pierce.....	6	6	11 do from do	165 00
Compton and Railway Station.....	S. Todd.....	1 <sup>1</sup> / <sub>2</sub>	6	9 do (from July 1, '90)	11 25
Contrecoeur and Railway Station.....	J. Hurteau.....	4	12	9 do 5 days (to Feb. 24, '91)	34 68



DETAIL of all payments for Mail Transportation in Montreal Postal Division,  
&c.—Continued.

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Contrecoeur and Varennes. ....	X. Handfield ...	18	12	1 month 18 days (to May 18, '90, & special service) .....	231 84
Cookshire and Island Brook.....	J. Miller .....	10	6	12 do .....	225 00
Cookshire and Railway Station ...	S. J. Osgood....	1 $\frac{1}{2}$	12	12 do .....	52 00
Cooper's Corners and Laguerre....	T. Cooper .....	1 $\frac{1}{2}$	12	12 do .....	100 00
Corbin and Frontier. ....	E. A. Roberts ...	2	6	12 do .....	60 00
Cornwall and St. Régis. ....	J. Angus.....	6	2	12 do .....	75 00
Coteau du Lac, Coteau Landing and Railway Station. ....	N. Deguire.....	3 & $\frac{3}{4}$	6 & 12	12 do .....	130 00
Coteau Landing & Railway Station. ....	G. Gauthier ...	2	19	12 do .....	200 00
Coteau Landing and Ste. Zotique ..	O. D. Prieur....	2 $\frac{1}{2}$	6	12 do .....	60 00
Coteau Station and St. Clé. ....	J. Lalonde .....	6	6	12 do .....	200 00
Côte St. Louis, Mile End and Montreal.....	N. Lachance....	2 $\frac{3}{4}$ & 2 $\frac{1}{4}$	6 & 12	11 do (from May 1, '90)	385 00
Côte St. Paul and Railway Station. ....	E. Latour .....	1	12	12 do .....	96 00
Covey Hill and Vicars.....	W. Orr .....	2	6	12 do .....	52 00
Cowansville and Railway Station....	J. E. O'Halloran	$\frac{1}{2}$	12	12 do .....	72 00
Crossbury and Robinson.....	W. Ross.....	3	2	12 do .....	30 00
Dalesville and Edina.....	J. Tomalty.....	6	1	12 do .....	30 00
Dalesville and Lachute.....	P. McArthur....	6	6	12 do .....	180 00
Dalesville and Louisa.....	W. Watchorn....	5	2	12 do .....	44 00
Dalesville and St. Michel de Wentworth .....	P. Froidevaux..	9	1	12 do .....	42 00
Dalhousie Mills and Peveril.....	A. Morrison....	2	6	12 do .....	60 00
Danby and Railway Station.....	S. D. McGee....	50yds.	12	3 do (to June 30, '90).	3 00
do do .....	W. Duff.....	50yds.	12	9 do from do .....	9 00
Dell and Scotstown.....	M. J. McDonald	5 $\frac{1}{2}$	1	12 do .....	50 00
Derby Line, Rock Island, Stanstead and Railway Station. ....	H. A. Channelle.	1 & 1 $\frac{1}{2}$	6 & 18	12 do .....	180 00
Dewittville and Railway Station....	J. Holiday.....	12	12	12 do .....	75 00
Dillon and Eastman.....	F. P. Dufresne..	3	3	12 do .....	63 00
Dixville and Railway Station.....	B. R. Baldwin..	$\frac{1}{2}$	12	12 do .....	60 00
Dorval and Railway Station.....	D. Descary.....	$\frac{1}{2}$	12	12 do .....	100 00
do do .....	do .....	$\frac{1}{2}$	6	4 do (to Sept. 30, '90).	16 66
Douglasburg and Napierville. ....	P. Paré.....	2	3	12 do .....	40 00
Drummondville and Melbourne .....	P. Duguay.....	24	6	12 do .....	500 00
Drummondville and Railway Station	J. F. Picotin....	$\frac{3}{4}$	12	12 do .....	48 00
Dufresne's Mills and South Durham	J. O. J. Dufresne	4	6	6 do 23 days (to Oct. 23, '90).	28 12
Dufresne's Mills and Ste. Christine.	X. Legrand.....	2 $\frac{1}{2}$	3	6 do do .....	22 50
Dunboro', Scotsmore and Railway Station .....	F. E. Scott.....	2 $\frac{1}{2}$ & 2 $\frac{3}{4}$	3 & 6	12 do .....	125 00
Dundee and Railway Station.....	J. Tyo.....	$\frac{1}{2}$	12	12 do .....	100 00
Dunham and East Dunham.....	J. Call.....	3	6	12 do .....	115 00
Dunham, Stanbridge East and Stanbridge Station.....	J. H. Martin....	13 & 7	6	4 do (to July 31, '90).	122 66
do do .....	W. Turnbull....	13 & 7	6	8 do from do .....	328 66
East Angus and Linda.....	D. B. Hall.....	1 $\frac{1}{2}$	3	12 do .....	50 00
East Angus and Railway Station....	F. P. Buck.....	100yds	12	3 do (to June 30, '90).	4 00
do do .....	J. F. Wilson....	100yds	12	9 do from do .....	19 50
East Farnham and Railway Station.	C. H. Mansfield.	1	12	12 do .....	150 00
Eastman and Railway Station.....	S. Daignault....	1	12	12 do .....	93 75
Eastman Railway Station and St. Etienne de Bolton.....	L. Paulin.....	5	6	9 do 20 dys. (from June 11, '90).....	108 66
Eaton and Railway Station.....	A. Taylor .....	$\frac{3}{4}$	12	12 do .....	100 00
Echo Vale Railway Station & Piopolis	H. Ryan.....	8 $\frac{1}{2}$	6	11 do 8 days (to Mar. 31, '90; broken period).....	277 16
Echo Vale and Railway Station.....	J. P. Jones.....	33 yds	12	do do .....	16 91
Egypte and St. Ephrem d'Upton ..	E. Chaput.....	8 $\frac{1}{2}$	6	12 do .....	165 00

DETAIL of all payments for Mail Transportation in Montreal Postal Division,  
&c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Emileville and St. Pie. ....	M. Gauthier. ....	1	6	12 months. ....	52 00
Farnboro' and West Shefford. ....	J. Enright. ....	2 $\frac{1}{2}$	2	12 do. ....	52 00
Farndon and Railway Station. ....	S. Paquette. ....	14 rods	6	12 do. ....	25 00
Farnham and Magenta. ....	J. Fournier. ....	5	2	12 do. ....	50 00
Farnham and Railway Station. ....	L. E. S. Choquette. ....	$\frac{1}{4}$	30	2 do 8 days (to June 8, '90). ....	21 79
do do. ....	do. ....	$\frac{1}{4}$	36	9 do 22 dys. from do. ....	105 31
Farnham and Stanbury. ....	M. J. Beattie. ....	8	2	12 do. ....	100 00
Farnham and St. Sabine. ....	C. Lague. ....	6	3	12 do. ....	75 00
Fontenoy and Melbourne. ....	S. Fraser. ....	6	2	12 do. ....	48 00
Foster and Railway Station. ....	C. B. Inglis. ....	$\frac{1}{2}$	24	12 do. ....	40 00
Franklin Centre and Hemmingford. ....	C. McGinnis. ....	16	6	3 do (to June 30, '90). ....	102 50
do do. ....	M. Fleming. ....	16	6	9 do from do. ....	375 00
Franklin Centre and Huntingdon. ....	W. D. McCallum. ....	16	6	3 do (to June 30, '90). ....	105 00
do do. ....	A. S. Beaune. ....	16	6	9 do from do. ....	300 00
Franklin Centre and Starnsboro'. ....	S. Huet. ....	2	6	12 do. ....	64 00
Frelighsburg and North Pinnacle. ....	G. C. Chadburn. ....	6 $\frac{1}{2}$	3	12 do. ....	89 48
Frelighsburg and St. Armand Station. ....	A. Shelters. ....	10	6	12 do. ....	397 00
Frelighsburg and Sweetsburg. ....	P. Pickle. ....	13 $\frac{1}{2}$	6	9 do (to Dec. 31, '90). ....	277 50
do do. ....	J. H. Church. ....	13 $\frac{1}{2}$	6	3 do from do. ....	92 50
Frost Village and Waterloo. ....	G. Moynan. ....	2 $\frac{1}{2}$	6	12 do. ....	94 00
Fulford and Railway Station. ....	J. B. Hubert. ....	$\frac{1}{2}$	12	11 do (from May 1, '90). ....	45 83
Galson and Gould. ....	M. L. McIver. ....	5 $\frac{1}{2}$	2	12 do. ....	42 00
Garland and St. Chrysostôme. ....	F. Z. Delisle. ....	4	3	12 do. ....	48 00
Gasparine and Holton. ....	F. Delage. ....	3 $\frac{1}{2}$	2	12 do. ....	34 00
Genoa and St. Hermas. ....	J. Gordon. ....	3 $\frac{1}{2}$	2	12 do. ....	48 00
Georgeville and Knowlton Landing. ....	D. A. Bullock. ....	2	3	12 do. ....	78 50
Georgeville and Magog. ....	C. A. Rexford. ....	10	6	12 do. ....	260 00
Georgeville and Magoon's Point. ....	W. H. Brevoort. ....	5 $\frac{1}{2}$	2	12 do. ....	52 00
Georgeville and Stanstead Junction. ....	W. H. Rediker. ....	13	6	9 do (to Dec. 31, '90). ....	251 25
do do. ....	P. D. Longeway. ....	13	6	3 do from do. ....	83 75
Geraldine and Stockwell. ....	C. Newman. ....	3 $\frac{1}{2}$	2	12 do. ....	26 00
Girard and Railway Station. ....	T. Girard. ....	24 yds	12	12 do. ....	24 00
Glen Iver and Sherbrooke. ....	J. McIver. ....	7 $\frac{1}{2}$	2	12 do. ....	64 00
Gould and North Hill. ....	D. W. McDonald. ....	4 $\frac{1}{2}$	2	12 do. ....	42 00
Gould and Red Mountain. ....	C. Smith. ....	5	2	12 do. ....	40 00
Gould and Scotstown. ....	D. Morrison. ....	7 $\frac{1}{2}$	6	6 do (to Sept. 30, '90). ....	166 50
do do. ....	A. Morrison. ....	7 $\frac{1}{2}$	6	6 do from do. ....	166 50
Gould Station and Railway Station. ....	R. H. Cowan. ....	$\frac{1}{4}$	12	12 do. ....	40 00
Granboro' and Granby. ....	G. Vittie. ....	6	3	9 do (to Dec. 31, '90). ....	85 50
do do. ....	do. ....	6 $\frac{1}{4}$	3	3 do from do. ....	24 00
Granby and Milton. ....	A. Clow. ....	9	6	12 do. ....	223 00
Granby and Railway Station. ....	S. Page. ....	$\frac{1}{2}$	12	12 do. ....	75 00
Granby and Shefford Mountain. ....	F. W. Barr. ....	8	3	12 do. ....	97 00
Grenville and Lost River. ....	A. McPhee. ....	19	2	12 do. ....	200 00
Grenville and Railway Station. ....	T. Cummings. ....	1 $\frac{1}{2}$	6	12 do. ....	48 00
Hallerton and Hemmingford. ....	T. Kenney. ....	4 $\frac{3}{4}$	3	12 do. ....	75 00
Hardwood Flat and Robinson. ....	W. R. Todd. ....	3 $\frac{1}{2}$	2	12 do. ....	26 00
Hatley and Railway Station. ....	B. Martin. ....	3 $\frac{1}{2}$	6	9 do (to Dec. 31, '90). ....	93 75
do do. ....	do. ....	3 $\frac{1}{2}$	6	3 do from do. ....	50 00
Heathton and South Barnston. ....	W. W. Heath. ....	$\frac{1}{10}$	6	12 do. ....	40 00
Helena and White's Station. ....	T. Salen. ....	4	6	12 do. ....	147 00
Hemmingford and Roxham. ....	W. C. Kingsbury. ....	6	2	12 do. ....	35 00
Henrysburg and Lacolle. ....	G. Giroux. ....	8 $\frac{1}{2}$	3	12 do. ....	120 00
Henryville and Stanbridge Station. ....	P. Girard. ....	8	6	12 do. ....	189 00
Hochelaga and Longue Pointe. ....	N. Richard. ....	33	6	12 do. ....	250 00
Hochelaga and Montreal. ....	N. Racine. ....	2 $\frac{1}{2}$	18	12 do. ....	450 00
Holton and Ste. Clothilde de Chateaugay. ....	C. B. Bergevin. ....	2	3	10 do (to Jan. 31, '91). ....	28 33
do do. ....	F. Dextras. ....	2	3	2 do from do. ....	8 33
Howick and Railway Station. ....	L. Parent. ....	$\frac{1}{4}$	18	12 do. ....	73 48

DETAIL of all payments for Mail Transportation in Montreal Postal Division,  
&c.—Continued.

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Howick and St. Chrysostôme ....	T. Herbert.....	9	6	12 months .....	240 00
Huntingdon and Railway Station...	J. Paulman.....	$\frac{1}{2}$	18	12 do .....	105 00
Iron Hill and Sweetsburg.....	W. Moffatt.....	8	3	12 do .....	120 00
Island Brook and New Mexico.....	W. H. Taylor....	4	3	3 do (to June 30, '90)..	13 00
do do .....	E. Dawson.....	$4\frac{1}{2}$	3	9 do from do .....	43 86
Isle Bizard and Ste. Geneviève.....	E. Roussin.....	$\frac{1}{2}$	6	10 do 15 days (to Feb. 15, '91).....	43 88
do do .....	do .....	$\frac{1}{2}$	12	1 do 13 days from do .....	12 22
Isle Perrot and Ste. Anne de Bellevue.....	J. Monpetit....	$5\frac{1}{4}$	6	12 do .....	156 00
Johnville and Railway Station.....	E. P. Smith.....	$\frac{1}{4}$	6	12 do .....	28 00
Katevale and North Hatley .....	H. B. Ayers....	$4\frac{1}{2}$	3	12 do .....	70 00
Kelso and Trout River Ry. Station.	D. McFarlane....	$3\frac{1}{2}$	6	12 do .....	144 00
Keith and Robinson .....	J. McLennan....	$3\frac{1}{2}$	3	12 do .....	96 00
Knowlton and Railway Station .....	A. E. Kimball...	$\frac{1}{4}$	24	12 do .....	100 00
Knowlton and St. Etienne de Bolton	L. Paulin.....	9	3	2 do 10 days (to June 10, '90).....	26 33
Knowlton and West Bolton.....	J. Dubois.....	3	3	9 do 20 days from do .....	36 22
L'Acadie and Railway Station.....	N. Piladeau....	$\frac{1}{3}$	12	12 do .....	52 00
L'Acadie and St. Jacques la Mineur	E. F. Poirier....	5	6	12 do .....	160 00
Lachine Locks and Railway Station	F. X. Gariépy....	$\frac{1}{2}$	12	12 do .....	60 00
Lachine Rapids and Ry. Station....	D. Dunberry....	2	6	12 do .....	100 00
Lachine Station and Letter Boxes...	J. O'Flaherty....	12	12	12 do .....	30 00
Lachute and Lachute Mills .....	J. Fish.....	1	12	12 do .....	62 00
Lachute and Lakefield.....	F. Rogers.....	9	3	12 do .....	111 00
Lachute and Railway Station.....	G. L. Meikle....	$\frac{1}{6}$	12	12 do .....	36 00
Lachute and Shrewsbury.....	J. Chambers....	$14\frac{1}{2}$	3	12 do .....	155 00
Lac Masson and St. Jérôme.....	M. Piché.....	22	3	12 do .....	250 00
Lac Masson and Ste. Lucie de Doncaster	N. Forget.....	10	3	12 do .....	156 00
Lacolle and Odelltown.....	J. H. Clarkson..	3	3	11 do (to Feb. 28, '91)..	44 00
do do .....	J. Gray.....	3	3	1 do from do .....	4 00
Lacolle and St. Bernard Sud.....	J. B. Bedard....	2	3	2 do (to May 31, '90)..	5 00
Lake Megantic and Railway Station	I. N. Thibodeau..	275 yds	12	12 do .....	36 00
Lambton and Stornoway.....	E. Belanger.....	9	6	12 do .....	212 00
Landreville and Ormstown.....	V. Brault.....	4	2	7 do (to Oct. 31, '90)..	29 16
do do .....	A. Lemieux....	4	2	5 do from do .....	20 84
La Patrie, Scotstown & West Ditton	S. Rolin.....	9 & 3	6 & 3	12 do .....	225 00
La Plaine and Railway Station.....	C. Gauthier....	80 yds	12	12 do .....	20 00
Laprairie and Railway Station.....	A. Lamarre....	$\frac{3}{4}$	12	12 do .....	70 00
La Présentation and St. Hyacinthe.	H. Auger.....	6	6	3 do (to June 30, '90)..	50 00
do do .....	M. Leclaire....	6	6	9 do from do .....	150 00
Laurel and Lost River.....	M. McCluskey..	6	1	12 do .....	36 00
Lawrenceville and North Stukely ..	C. Colin.....	4	3	12 do .....	100 00
Lennoxville and Milby .....	A. Aldrich.....	5	6	12 do .....	124 00
Lennoxville and Railway Station...	E. W. Abbott....	$\frac{1}{4}$	24	12 do .....	101 00
do do (C.P.R.) .....	do .....	70 yds	6	9 do 22 days (from June 9, '90).....	20 27
Leopold and Shrewsbury.....	J. Thompson....	6	2	12 do .....	60 00
Lineboro' and Railway Station .....	J. Wood.....	$\frac{1}{2}$	12	12 do .....	26 00
Longueuil and Railway Station .....	G. Brisette....	$\frac{1}{3}$	12	1 month 18 days (to May 18, '90).....	9 75
do do .....	do .....	$\frac{1}{3}$	24	8 mos. 23 days (to Feb. 10, '91).....	102 47
do do .....	do .....	$\frac{1}{3}$	18	1 mo. 18 days (from Feb. 10, '91).....	14 29
Magog and Railway Station.....	L. N. Allard....	$\frac{1}{4}$	12	12 do .....	100 00
Malmaison and Notre Dame de Stanbridge.....	I. Hebert.....	3	6	12 do .....	120 00



DETAIL of all payments for Mail Transportation in Montreal Postal Division,  
&c.—Continued.

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Mansonville and Railway Station ..	W. B. Manson ..	2½	6	12 months .....	125 00
Mansonville and Vale Perkins .....	J. M. Alex. ....	5½	3	12 do .....	60 00
Mansonville Railway Station and West Potton .....	S. L. Elkins ....	3	3	12 do .....	60 00
Maple Leaf and Sawyerville .....	J. W. Planche ..	4½	6	12 do .....	125 00
Marsden and Notre Dame des Bois ..	C. Demers .....	14	3	12 do .....	225 00
Marsden and Railway Station .....	J. D. Morrison ..	½	12	12 do .....	24 00
Marsden and Whitwick .....	J. R. McDonald ..	3	2	12 do .....	36 00
Melbourne and New Rockland .....	M. Delaney .....	7½	6	12 do .....	240 00
Melbourne and Upper Melbourne ..	N. Coburn .....	4	13	12 do .....	100 00
Melbourne and Waterloo .....	S. Jamieson .....	33	3	12 do .....	500 00
Miletta and Railway Station .....	M. A. Murray ..	143yds	6	12 do .....	10 00
Mille Isles and St. Jérôme .....	T. Taylor .....	12	3	12 do .....	122 00
Minton and North Hatley .....	A. E. Fish .....	2½	3	12 do .....	52 00
Mirabel and St. Hermas Station ..	L. Lacroix .....	1½	6	12 do .....	56 00
Mongenaix, Ste. Justine de Newton and Railway Station .....	A. Labelle .....	3 & 1½	6 & 12	12 do .....	235 00
Montfort and Morin Flats .....	M. Boulaire .....	6	2	12 do .....	52 00
Montreal and Mount Royal Vale ..	O. F. Lilly .....	4½	12	12 do .....	240 00
Montreal and Outrement .....	B. T. Cooke .....	3½	6	1 do (to Apr. 30, '90)..	3 33
do do .....	W. F. Johnston ..	3½	6	9 do (to Jan. 31, '91)..	30 00
do do .....	J. Gauthier .....	3½	6	2 do from do .....	6 67
Montreal and Ry. Station (C.P.R.) ..	C. A. Dumaine ..	40 & 48	60 & 48	1 do (to Apr. 30, '90)..	192 15
do do .....	P. Jones .....	40 & 48	10 & 6	11 do from do .....	2,036 83
Montreal—C.P.R. and G.T.R. Stations (transfer) .....	C. A. Dumaine ..	450 yd	5	1 do (to April 30, '90)	16 25
Montreal Receiving House and Street Letter Boxes .....	P. Kennedy .....		49	12 do .....	4,031 00
Montreal and St. Eustache .....	S. Munier .....	21	6	12 do .....	1,000 00
Montreal & St. Gabriel de Montreal ..	P. Doyle .....	2	18	3 do (to June 30, '90)..	62 50
do do .....	J. Turner .....	2	18	9 do from do .....	180 00
Montreal and St. Léonard de Port Maurice .....	J. Gervais .....	8½	6	12 do .....	306 00
Montreal and Sault au Récollet .....	F. St. Vincent ..	7	6	12 do .....	150 00
Montreal and Varennes .....	H. Dubois .....	15	6	1 do 18 dys (to May 18, '90 and special service).	221 33
do do .....	A. Dumaine .....			Special trip .....	5 00
Montreal and Wharf .....	P. Jones .....	½	12	Season 1890 .....	126 00
Moore's Station and Railway Station ..	P. C. Moore .....	½	12	12 months .....	24 00
Morin Flats and St. Adolphe de Howard .....	H. Paquet .....	9	1	12 do .....	45 00
Mount Johnson and Versailles .....	A. T. Moquin .....	4	6	12 do .....	150 00
Napierville and Stottville .....	F. Hetier .....	7	6	12 do .....	140 00
New Glasgow and Railway Station ..	F. Langlois .....	¼	12	12 do .....	52 00
North Georgetown and Ry. Station ..	L. Turcot .....	¼	6	12 do .....	40 00
North Hatley and Railway Station ..	B. LeBaron .....	2	6	12 do .....	30 00
North Sutton and West Brome .....	O. Sweet .....	2	3	12 do .....	50 00
Norton Creek and St. Rémi .....	J. B. Boyer .....	9½	6	12 do .....	298 00
Ormstown and Railway Station .....	T. H. Paling .....	½	18	12 do .....	144 00
Philipsburg and St. Armand Railway Station .....	F. Cadorette .....	2	12	12 do .....	195 00
Pincourt and Terrebonne .....	L. Lebeau .....	4	2	1 do (from Mar. 1, '91)	4 00
Pointe au Chêne and Ry. Station ..	T. Mathews .....	33 yds	12	12 do .....	30 00
Pointe aux Trembles and Rivière des Prairies .....	F. Roy .....	6	6	12 do .....	180 00
Pointe Claire and Railway Station ..	F. Lanthier .....	1	6	12 do .....	50 82
Pont Viau and Pont du Sault .....	T. Belanger .....	¾	6	12 do .....	48 00
Port Lewis and St. Anicet .....	S. Dupuis .....	5	3	12 do .....	74 00
Ricards and St. Hermenégilde .....	L. Letourneau ..	1	2	12 do .....	30 00
Rigaud and Railway Station .....	J. Charlebois ..	4	12	2 do (from Feb. 1, '91)	8 33

DETAIL of all payments for Mail Transportation in Montreal Postal Division,  
&c.—Continued.

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Rigaud and St. Rédempteur .....	B. Lalonde.....	6 $\frac{1}{2}$	3	12 months .....	84 00
Rivière des Fèves and St. Urbain .....	Z. Bergevin.....	2 $\frac{1}{2}$	3	12 do .....	32 00
Robinson and Railway Station .....	L. Pope .....	1 $\frac{1}{2}$	12	12 do .....	60 00
Rock Forest and Railway Station .....	S. Simpson.....	1 $\frac{1}{2}$	6	12 do .....	32 00
Rock Forest and Suffield .....	do .....	1 $\frac{1}{2}$	3	12 do .....	52 00
Rougemont and Railway Station .....	J. Bachelder.....	1 $\frac{1}{2}$	12	12 do .....	52 00
Roxton East and Roxton Falls .....	E. Dalpe .....	5	2	12 do .....	40 00
Roxton Falls and Railway Station .....	J. Wood .....	$\frac{1}{2}$	12	9 do (from July 1, '90)	24 00
Roxton Pond and South Roxton .....	L. Nadeau .....	3 $\frac{1}{2}$	6	12 do .....	87 00
Russeltown and St. Chrysostôme .....	A. Beaudin .....	3	6	12 do .....	70 00
Ste. Adèle and Ste. Agathe .....	R. Charbonneau .....	12	6	12 do .....	230 00
Ste. Adèle and St. Jérôme .....	G. Valiquette .....	17	6	12 do .....	450 00
Ste. Agathe and St. Jovite .....	E. St. Aubin .....	19	3	10 do 15 days (to Feb. 15, '91) .....	395 00
do do .....	do .....	19	6	1 do 13 days from do .....	110 00
St. Agnès de Dundee and Railway Station .....	T. Rowley .....	$\frac{1}{2}$	6	12 do .....	48 00
St. Aimé and St. Hyacinthe .....	A. Dannais .....	23 $\frac{1}{2}$	6	12 do .....	500 00
St. Aimé and Yamaska .....	J. Parenteau .....	6 $\frac{1}{2}$	6	12 do .....	140 00
St. Alexandre and Railway Station .....	L. Pouliot .....	1	12	12 do .....	72 00
Ste. Angèle de Monnoir and Railway Station .....	B. Loiselle .....	$\frac{1}{2}$	12	4 do 23 days (to Oct. 31, '90) .....	19 10
Ste. Angèle de Monnoir and Ste. Marie de Monnoir R'y Station .....	P. Bedard .....	5	6	2 do 8 days (to June 8, '90) .....	28 43
do do .....	P. Brodeur .....	5	6	4 do 28 days (from Nov. 3, '90) .....	61 54
St. Anicet and White's Station .....	S. Dupuis .....	10	6	12 do .....	300 00
Ste. Anne de Bellevue and Railway Station .....	A. St. Denis .....	1	6	2 do 16 days (to Sept. 30, '90) .....	6 60
Ste. Anne des Plaines and Railway Station .....	D. D. Gaudette .....	$\frac{1}{2}$	12	12 do .....	32 00
Ste. Anne de Sorel and Sorel .....	E. Latraverse .....	3	6	12 do .....	75 00
St. Antoine and St. Denis .....	A. Lacroix .....	1	6	12 do .....	70 00
St. Athanase and Railway Station .....	H. Malhiot .....	$\frac{1}{2}$	24	12 do .....	100 00
St. Augustin and Railway Station .....	A. Filiatrault .....	1 $\frac{1}{2}$	6	12 do .....	56 00
Ste. Barbe and St. Stanislas de Kostka .....	A. Benoit .....	4 $\frac{1}{2}$	3	12 do .....	67 48
St. Bazile la Grand and R'y Station .....	E. Lalumière .....	120 yds	6	12 do .....	40 00
St. Bonaventure and St. Guillaume d'Upton .....	J. Lavallée .....	7 $\frac{1}{2}$	3	10 do (to Jan. 31, '91) .....	72 50
do do .....	I. Tessier .....	7 $\frac{1}{2}$	6	2 do from do .....	29 60
Ste. Brigide and Railway Station .....	J. Donnelly .....	3	6	12 do .....	110 00
St. Bruno and Ste. Julie de Verchères .....	A. Hébert .....	5	6	12 do .....	170 00
Ste. Camille and Sherbrooke .....	Z. Manseau .....	26	1	12 do .....	77 00
St. Césaire and Railway Station .....	F. Garceau .....	$\frac{1}{2}$	12	12 do .....	50 00
St. Charles and St. Marc .....	H. Desjournin .....	1 $\frac{1}{2}$	7	12 do .....	60 00
St. Columbin and Ste. Scholastique .....	M. Phelan .....	14	6	12 do .....	380 00
St. Constant and Railway Station .....	O. Robert .....	1 $\frac{1}{2}$	12	12 do .....	24 48
Ste. Cunégonde and R'y Station .....	G. N. Ducharme .....	$\frac{1}{2}$	24	12 do .....	100 00
St. Damase and Ste. Hyacinthe .....	J. B. Després .....	7 $\frac{1}{2}$	6	12 do .....	235 00
St. Dominique and Ste. Hyacinthe .....	do .....	7	6	12 do .....	185 00
St. Dominique des Cèdres and Railway Station .....	S. Trottier .....	2	3	12 do .....	40 00
St. Edouard and St. Michel .....	E. Hamelin .....	4 $\frac{1}{2}$	6	12 do .....	118 00
St. Ephrem d'Upton and Ste. Helene de Bagot .....	A. Massé .....	7	6	12 do .....	124 00
St. Eustache and Railway Station .....	J. M. Goulet .....	1 $\frac{1}{2}$	6	12 do .....	48 00
St. Eustache and St. Joseph du Lac .....	J. B. Laurin .....	11	3	12 do .....	150 00
St. François de Salles and Terrebonne .....	C. Gascon .....	3 $\frac{1}{2}$	6	12 do .....	58 33
St. François Xavier de Brompton and Windsor Mills .....	J. Levesque .....	4	3	12 do .....	90 00

DETAIL of all payments for Mail Transportation in Montreal Postal Division,  
&c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
St. Geneviève and R'y Station.....	A. Legault .....	3	6	9 months (to Dec. 31, '90)	\$ 97 50
St. Germain de Grantham and Rail- way Station.....	E. Paré.....	1	12	12 do	60 00
St. Guillaume and Railway Station.	A. René.....	12	12	do	100 00
St. Guillaume and St. Pie de Guire.	I. Dauplaise.....	11	3	10 do (to Jan. 31, '91)..	116 66
St. Henri de Montréal and Railway Station.....	A. J. Bissonnette.....	10	24	12 do	90 00
St. Hermas and Railway Station.....	P. E. Clairoux.....	4	6	12 do	160 00
St. Hilaire Station and R'y Station.	F. Martin.....	100 yds	36	12 do	100 00
St. Hilaire Station and St. Jean Baptiste de Rouville.....	R. E. Meunier.....	5	6	12 do	156 00
St. Hilaire Station and Sorel.....	S. & J. Valois.....	33	6	12 do	1,050 00
St. Hubert and Railway Station.....	F. Robert.....	1	7	12 do	70 00
St. Hugues and St. Hyacinthe.....	A. Guertin.....	14	6	12 do	495 00
St. Hugues and St. Marcel.....	T. Forcier.....	7	6	12 do	179 00
St. Hyacinthe and St. Thomas.....	A. Girouard.....	6	2	1 do (from Mar. 1, '91)	5 00
St. Isidore and Railway Station.....	J. Primeau.....	12	12	do	72 00
St. Isidore Junction and R'y Station	F. Baillargeon.....	17 yds	12	12 do	16 00
St. Janvier and Railway Station.....	J. Jérôme.....	4	12	12 do	40 00
St. Jérôme and Railway Station.....	E. Marchand.....	1	12	12 do	52 00
St. Jérôme and Ste. Thérèse.....	E. Ouimet.....	14	6	12 do	300 00
St. Joachim and Warden.....	J. Bachand.....	7	6	12 do	168 00
St. Johns and R'y Station (C. P. R.)	W. Moore.....	3	18	2 do 8 days (to June 8, '90).....	37 91
do do (C. P. R.) do	do	3	24	9 do 22 days from do	202 60
do do (C. Vt.) do	do	3	12	12 do	100 00
St. Johns and St. Luc.....	M. Marsan.....	6	3	12 do	80 00
St. Joseph de Sorel and Sorel.....	A. Bouvier.....	1	6	12 do	48 00
St. Louis de Gonzague and St. Timothé Railway Station.....	C. Trepanier.....	4	6	12 do	144 00
St. Louis Station and R'y Station.....	A. Lalonde.....	50 yds	12	12 do	20 00
Ste. Madeleine and Railway Station	J. D. Rainville.....	1	12	12 do	50 00
Ste. Marie de Monnoir and Railway Station.....	M. Bessette.....	1	12	12 do	49 00
Ste. Marthe and Vaudreuil.....	E. Gauthier.....	15	6	12 do	500 00
Ste. Martine and Railway Station.....	J. Marchand.....	12	12	5 do (to Aug. 31, '90).....	29 16
do do do	do	18	7	do from do	61 25
Ste. Martine Station and Ry Station	J. Beaudreault.....	12	12	do	25 00
Ste. Martine Station and St. Urbain	Z. Bergevin.....	4	6	12 do	130 00
St. Mathias and Village Richelieu..	O. Darche.....	3	6	12 do	140 00
Ste. Monique and Railway Station (St. Augustin).....	D. Léonard.....	2	6	12 do	78 00
St. Nazaire and St. Théodore d'Acton	D. Rondeau.....	6	3	6 do (to Oct. 31, '90).....	39 99
do do do	M. Lepine.....	6	3	5 do from do	33 32
St. Ours and St. Roch de Richelieu.	J. B. Paquette.....	1	6	12 do	40 00
St. Philippe de Laprairie and Rail- way Station.....	F. C. Larose.....	1	12	12 do	47 00
St. Philippe Railway Station and Stonefield.....	R. Chambers.....	9	6	12 do	280 00
Ste. Philomène and Railway Station	J. B. D'Amour.....	2	6	12 do	145 00
St. Pie and Railway Station.....	M. Drolet.....	1	12	3 do (to June 90, '90).....	9 50
do do do	J. B. Gendreau.....	1	12	9 do from do	27 00
St. Placide and Ste. Scholastique.....	A. Gratton.....	13	6	12 do	300 00
St. Polycarpe and Railway Station.....	F. Lavergne.....	1	12	12 do	58 99
St. Polycarpe and St. Téléphore.....	do	5	6	12 do	180 00
St. Rémi and Railway Station.....	J. B. Boyer.....	1	12	12 do	98 00
St. Robert and Railway Station.....	A. Plante.....	2	6	12 do	100 00
Ste. Rose and Railway Station.....	A. E. Léonard.....	1	12	12 do	72 00
Ste. Scholastique and Ry. Station.....	A. Gratton.....	1	12	12 do	40 00
St. Sébastien and Venice.....	A. T. Hunter.....	3	2	12 do	48 00
Ste. Sophie de Lacorne and Railway Station.....	M. Levesque.....	1	12	12 do	48 00
St. Stanislas de Kostka and Valley- field.....	E. Cardinal.....	9	6	12 do	195 00



DETAIL of all payments for Mail Transportation in Montreal Postal Division,  
&c.—*Concluded.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
St. Théodose and Verchères.....	L. N. Handfield.	6	3	12 months .....	78 00
Ste. Thérèse and Railway Station...	N. Boismenu .....	24	12	do .....	80 00
St. Timothé and Railway Station...	J. E. Daoust .....	14	12	6 do (to Sept. 30, '90)..	24 50
do do .....	C. Létourneau .....	14	12	6 do from do .....	24 50
St. Valentine and Stottville.....	F. Hetier .....	3	6	12 do .....	72 00
St. Vincent de Paul and Ry. Station	C. E. Germain .....	8	12	12 do .....	40 00
Sabrevois and St. Johns.....	A. M. White .....	8	3	1 do (to April 30, '90)..	9 00
do do .....	do .....	8	6	11 do from do .....	172 33
Savages Mills and Railway Station...	H. T. Tamlin .....	6	12	do .....	48 00
Sawyer ville and Railway Station...	R. Cairns .....	12	12	do .....	50 00
Scotstown and Railway Station.....	R. B. Scott .....	12	12	do .....	40 00
Sheffington, West Shefford and Railway Station.....	J. Harris .....	24	6 & 12	12 do .....	100 00
Sherbrooke and Ry. Station (C.P.R.)	C. H. Foss .....	32 & 12	12	12 do .....	75 00
Sherbrooke and Railway Station...	C. H. Foss, Exr. ....	32 & 12	12 & 24	12 do .....	200 00
Sherbrooke, East Sherbrooke and Street Letter Boxes .....	R. A. Biron .....	18 & 7	12	do .....	350 00
Sherbrooke and Stoke Centre.....	M. Biron .....	9	2	12 do .....	104 00
Sherrington and Railway Station...	B. Vautrin .....	2	6	12 do .....	115 00
Smith's Mills and Railway Station...	W. T. Knight .....	12	12	do .....	16 00
Sorel and Railway Station .....	B. Leclaire .....	12	12	do .....	83 00
Sorel and Ste. Victoire .....	H. Paulhus .....	9	3	12 do .....	140 00
South Durham and Ste. Christine...	F. X. Legrand .....	6	3	1 do 9 days (to Nov. 30, '90).....	8 47
South Durham and Valcourt.....	E. J. Duffy .....	15	3	12 do .....	187 20
South Stukely and Railway Station.	L. H. Knowlton .....	1	6	12 do .....	60 00
Springhill and Railway Station.....	D. K. Macdonald .....	1	12	12 do .....	40 00
Spring Hill and Stornoway.....	E. Belanger .....	9	6	12 do .....	300 00
Stanstead Junction and Ry. Station	C. H. Gordon .....	60 yds	12	12 do .....	30 00
Staynerville and Railway Station...	J. M. Dorion .....	4	12	10 do (to Jan. 31, '91)..	10 00
do do .....	H. Paquin .....	30 yds	12	2 do from do .....	2 00
Stornoway and Tolsta .....	A. Morrison .....	4	2	12 do .....	40 00
Sutton and Railway Station.....	R. A. Shephard .....	1	12	12 do .....	60 00
Sutton Junction and Ry. Station...	A. W. Westover .....	1	12	12 do .....	30 00
Sweetsburg and Railway Station...	G. T. Batchelder .....	1	12	12 do .....	64 00
Terrebonne and Railway Station...	E. Brière .....	3	6	12 do .....	80 00
Valleyfield and Ry. Station (C.A.R.)	L. Leduc .....	3	12	12 do .....	100 00
do do (G.T.R.) .....	do .....	4	24	12 do .....	49 00
Valleyfield and Street Letter Box...	D. Dion .....	4	12	12 do .....	72 00
Valois and Railway Station.....	P. G. Valois .....	150 yds	12	12 do .....	50 00
Varennes and Railway Station.....	A. Malo .....	300 yds	12	9 do 7 days (to Feb. 24, '91)..	46 24
Verchères and Railway Station.....	W. Forget .....	1	12	9 do 7 days (to Feb. 24, '91)..	46 24
Versailles and Railway Station.....	T. Lacombe .....	30 yds	12	12 do .....	20 00
Village Richelieu and Ry. Station...	N. D. D. Bessette .....	1	12	12 do .....	48 00
Warden and Railway Station .....	L. E. Richardson .....	46 rods	12	12 do .....	60 00
Waterloo and Railway Station.....	A. E. J. Beaulne .....	3	30	2 do 8 days (to June 8, '90).....	28 24
do do .....	do .....	2	36	9 do 22 days from do	140 20
West Brome and Railway Station...	N. Scott .....	3	12	12 do .....	50 00
Westbury Basin and Ry. Station...	O. Lepitre .....	30 yds	12	12 do .....	35 00
Wickham West and Ry. Station...	M. Léonard .....	1	12	6 do (to Sept. 30, '90)..	16 00
do do .....	F. Cormier .....	6	12	6 do from do .....	16 00
Total .....					\$53,351 64

W. H. SMITHSON,  
Accountant.

WILLIAM WHITE,  
Deputy Postmaster-General.

## NEW BRUNSWICK POSTAL DIVISION.

DETAIL of all payments for Mail Transportation in New Brunswick Postal Division, made within the Year ended 30th June, 1891.

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Acadie, Acadie Siding and Railway Station	S. Legere	10	2	12 months	99 00
Adamsville and Railway Station	J. M. Kennedy	7 <sup>1</sup> / <sub>2</sub>	12	12 do	40 00
Albert and Elgin	J. Garland	26	1	12 do	208 00
Albert and Lumsden	B. W. Fillmore	7	1	12 do	38 00
Albert and Point Wolf	A. R. Copp	20	6	6 do (to Sept. 30, '90)..	312 00
do do	J. E. Boyle	20	6	6 do from do	300 00
Albert and Railway Station	R. C. Atkinson	1 <sup>1</sup> / <sub>2</sub>	12	12 do	75 00
Albert Mines and Railway Station	E. Woodworth	4	12	12 do	40 00
Aldouane and Richibucto	P. Richard	8	2	9 do (to Dec. 31, '90)..	34 86
do do	J. Daigle	8	2	3 do from do	20 00
Alexander's Point and Lameque	C. Chiasson	3 <sup>1</sup> / <sub>2</sub>	1	12 do	25 00
Alexander's Point and Miscou Light House	C. Vibert	26	2	12 do	285 00
Alexander's Point and Shippigan	R. Dugue	3	3	9 do (to Dec 31, '90)..	112 50
do do	E. DeGrace	3	3	3 do from do	28 75
Alexandrina and Notre Dame	A. L. Hebert	4	1	12 do	20 80
Alison and Moncton	W. T. Jones	9	1	12 do	55 00
Allandale and Poquiock	D. Connelly	6	1	12 do	35 00
Alma and Hastings	J. E. McQuaid	4	1	12 do	26 00
Alma and Sinclair Hill	B. Conner	3	1	8 do (from Aug. 1, '90)	13 33
Ammon and Junction of Moncton Route.	D. E. Wilbur	2 <sup>1</sup> / <sub>2</sub>	1	5 do (from Nov. 1, '90)	4 16
Anagance and Corn Hill	S. L. Stockton	6	2	6 do (to Sept. 30, '90)..	34 00
do do	R. McCrossion	6	2	6 do from do	32 50
Anagance and Elgin	E. A. Robinson	18	2	12 do	144 00
Anderson and Upper Sackville	D. Wheaton	15 & 22	1	12 do	93 00
Andover and Carlingford	R. S. Slood	4	2	6 do (from Oct. 1, '90)	27 42
Andover and Fort Fairfield	do	7	2	6 do (to Sept. 30, '90)..	48 00
Andover and Railway Station	J. A. Perley	1	12	12 do	50 00
Annidale and English Settlement	J. H. Langley	4	2	12 do	47 00
Apoahqui and Case Settlement	G. N. Parlee	10	1	12 do	50 00
Apoahqui and Erb Settlement	H. E. Sinnott	4 & 9	1	12 do	44 20
Apoahqui, Collina and Pearsons	J. Wiles	11, 14 & 17	3 & 2	12 do	273 00
Apoahqui and Railway Station	J. A. Sinnott	100yds	12	12 do	62 60
Armstrong and Waterford	J. Gray	8	1	12 do	45 72
Armstrong's Brook and Jacquet River Station	W. Barclay	1	12	12 do	50 00
Armstrong's Brook and River Louise	do	3	6	12 do	175 00
Armstrong's Corner and Round Hill	A. Graham	20	2	12 do	168 00
Aroostook Junction and Railway Station	D. B. Hopkins	1 <sup>1</sup> / <sub>2</sub>	12	12 do	50 00
Aroostook Portage and California	D. Murchison	2	1	12 do	25 00
Back Bay and St. George	A. J. Seely	11	3	12 do	224 88
Baie Verte and Baie Verte Road	A. F. Copp	4	2	12 do	40 00
Baie Verte and Railway Station	A. C. A. Wells	1 <sup>1</sup> / <sub>2</sub>	12	12 do	60 00
Bairdsville and Beaconsfield	H. Baird	11	1	12 do	55 00
Barachois and Lower Abougoggin	H. Gallang	11 & 8	1	12 do	44 48
Barnaby River and Railway Station	J. O. Quilty	7 <sup>1</sup> / <sub>2</sub>	12	12 do	10 00
Bartibog and Chatham	J. Doyle	12	1	12 do	40 00
Bartlett's Mills and Railway Station	J. Bartlett	4	6	12 do	90 00
Bass River and South Branch	J. A. Campbell	16	3	12 do	269 00
Bath, Johnville and Kilfoil	G. Giberson	8 & 3 <sup>1</sup> / <sub>2</sub>	2 & 1	3 do (to June 30, '90)..	21 25
do do	H. McGuire	8 & 3 <sup>1</sup> / <sub>2</sub>	2 & 1	9 do from do	56 25
Bath and Railway Station	T. Bohan	1 <sup>1</sup> / <sub>2</sub>	12	12 do	60 00
Bathurst and Railway Station	J. Siewright	2	21	3 do (to June 30, '90)..	49 33
do do	do	2	24	9 do from do (and extra trips)	186 64

DETAIL of all payments for Mail Transportation in New Brunswick Postal Division, &c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Bathurst Village and Dunlop. . . . .	J. Nicol . . . . .	9	1	12 months . . . . .	46 48
Bathurst Village and Tête à Gauche River (South side). . . . .	A. Branch . . . . .	10 & 8	1	12 do . . . . .	39 48
Bathurst Village and Youghall. . . . .	R. Anderson. . . . .	5	3	12 do . . . . .	50 00
Bay du Vin and Chatham. . . . .	H. Sinclair. . . . .	25½	2	6 do (to Sept. 30, '90). . . . .	110 86
do do . . . . .	T. White. . . . .	25½	2	6 do from do . . . . .	125 00
Bay du Vin and Point Escuminac. . . . .	E. Nowlan. . . . .	21	2	12 do . . . . .	220 00
Bay du Vin Mills and Upper Bay du Vin. . . . .	W. Dickins. . . . .	5	1	12 do . . . . .	40 00
Bayfield and Railway Station . . . . .	F. Harper . . . . .	1½	6	12 do . . . . .	75 00
Bayside and St. Andrews. . . . .	J. Richardson. . . . .	7	2	12 do . . . . .	100 00
Bear Island and Scotch Lake. . . . .	J. Elliot. . . . .	4	1	12 do . . . . .	29 48
Beaufort and Bristol. . . . .	J. Boyer. . . . .	20	3	6 do (from Oct. 1, '90) . . . . .	153 00
Beaufort and Highlands. . . . .	H. Harvey. . . . .	9	3	6 do (to Sept. 30, '90). . . . .	55 00
Beaver Dam and Rusagornis. . . . .	W. Haining. . . . .	5	1	12 do . . . . .	26 00
Beaver Harbour and Black's Harbour	E. W. Cross. . . . .	3	1	12 do . . . . .	50 00
Beaver Harbour and Pennfield Ridge	F. Eldridge. . . . .	4	3	12 do . . . . .	149 48
Belledune and Belledune River. . . . .	P. Lannon. . . . .	4	3	12 do . . . . .	69 72
Belledune and Railway Station. . . . .	do . . . . .	1	12	12 do . . . . .	79 00
Belleisle Creek and Norton Station. . . . .	J. M. Huggard. . . . .	7	2	12 do . . . . .	57 00
Belliveau Village and St. Joseph. . . . .	S. Bourgeois. . . . .	7	2	12 do . . . . .	70 00
Belyea's Cove and Heustis Landing. . . . .	J. B. Mott. . . . .	3	2	12 do . . . . .	39 00
Benton and Railway Station. . . . .	A. J. Teed. . . . .	50 yds	12	12 do . . . . .	20 00
Benton and Speerville. . . . .	W. Speer. . . . .	5	2	9 do (from July 1, '90) . . . . .	48 75
Beresford and Railway Station. . . . .	J. Aubé. . . . .	100 yds	6	12 do . . . . .	35 00
Biggar Ridge and Foreston . . . . .	W. H. Staten. . . . .	4	1	12 do . . . . .	29 00
Birch Ridge and Red Rapids. . . . .	C. Roberts. . . . .	4	1	6 do (to Sept. 30, '90). . . . .	17 50
Black Brook and Chatham. . . . .	A. Manderson. . . . .	6	4	9 do (to Dec. 31, '90). . . . .	97 50
do do . . . . .	do . . . . .	6	4	3 do from do . . . . .	43 75
Black Lands and River Charlo. . . . .	W. Cook . . . . .	3	3	12 do . . . . .	38 00
Black Point and New Mills . . . . .	P. Devereux. . . . .	4	3	12 do . . . . .	57 48
Black Rock and Three Brooks. . . . .	L. Reed . . . . .	1½	2	12 do . . . . .	25 00
Blackville and Coughlan. . . . .	D. A. Coughlan. . . . .	4	1	12 do . . . . .	26 00
Blackville and Shinnickburn. . . . .	W. T. Underhill. . . . .	18	1	12 do . . . . .	120 00
Blackville and Underhill. . . . .	do . . . . .	2	3	12 do . . . . .	52 00
Blair Athol and Dalhousie. . . . .	J. McIntyre . . . . .	17	1	12 do . . . . .	90 00
Blakely and Enniskillen Station. . . . .	J. Blakely. . . . .	3	2	12 do . . . . .	45 00
Bloomfield and Railway Station. . . . .	N. Wetmore. . . . .	¾	12	12 do . . . . .	56 00
Bloomfield Ridge and Boiestown. . . . .	A. Fairley . . . . .	10	1	12 do . . . . .	59 00
Bloomfield Ridge and Hayesville. . . . .	D. Bruce. . . . .	2	1	12 do . . . . .	15 00
Bloomfield Station and Central Norton. . . . .	N. Wetmore. . . . .	3½	3	12 do . . . . .	65 00
Bloomfield Station and Ry. Station. . . . .	A. Taylor . . . . .	1½	12	12 do . . . . .	20 00
Bocabec and St. Andrews. . . . .	P. McLaughlin. . . . .	9	3	12 do . . . . .	195 00
Boiestown and Parker's Ridge. . . . .	J. W. Parker. . . . .	5	1	12 do . . . . .	25 00
Bon Accord and Kincardine. . . . .	D. Burns . . . . .	5	2	12 do . . . . .	80 00
Bonny River Station and Elmcroft. . . . .	G. F. Williams. . . . .	6	1	12 do . . . . .	45 00
Bonny River Station and Ry. Station	G. Matheson . . . . .	1½	12	12 do . . . . .	50 00
Boundary Creek and Ry. Station. . . . .	R. B. C. Weldon . . . . .	1½	12	12 do . . . . .	30 00
Boundary Creek and Steeves Mountain. . . . .	do . . . . .	3½	1	12 do . . . . .	38 00
Bourgeois, Grandique and Poirier. . . . .	R. Poirier . . . . .	4 & 2	1 & 3	12 do . . . . .	90 00
Breadalbane and New Mills Railway Station . . . . .	A. McNair . . . . .	1	12	12 do . . . . .	50 00
Briggs Corner and Sheffield. . . . .	H. L. Bailey. . . . .	38	2	9 do (to Dec. 31, '90). . . . .	255 00
do do . . . . .	J. McKay. . . . .	39	2	3 do from do . . . . .	85 00
Bristol and Highlands. . . . .	S. J. Rogers. . . . .	11	3	6 do (to Sept. 30, '90). . . . .	98 50
Bristol and Railway Station. . . . .	J. J. Hayward. . . . .	1½	12	12 do . . . . .	45 00
Brownsville and Stewarton. . . . .	A. McGregor. . . . .	5	1	12 do . . . . .	25 84
Buetouche and McLaughlan Road. . . . .	T. Roberts. . . . .	16 & 3	2	12 do . . . . .	182 34
Buetouche and Richibucto . . . . .	do . . . . .	18	3	12 do . . . . .	228 00
Buetouche and St. Castin . . . . .	L. Sawyer. . . . .	6½	1	12 do . . . . .	30 00
Buetouche and St. Jean-Baptiste. . . . .	F. X. J. Michaud . . . . .	1½	6	12 do . . . . .	30 00



DETAIL of all payments for Mail Transportation in New Brunswick Postal Division, &c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Buctouche and Shediac .....	J. D. Weldon .....	22	6	12 months .....	494 00
Bull Moose Hill and Springfield .....	W. E. Benson .....	5	1	12 do .....	24 00
Bumfrau, Mineral and Ry. Station .....	A. J. Kearney .....	5 & $\frac{1}{2}$	1 & 2	12 do .....	70 00
Burnt Church and Church Point .....	F. H. McKnight .....	4	3	12 do .....	40 00
Butternut Ridge and Carsonville .....	H. F. Price .....	15	1	12 do .....	93 00
Butternut Ridge, New Canaan and Forks .....	B. Perry .....	12 & 3	2 & 1	12 do .....	128 00
Butternut Ridge and Ry. Station .....	A. E. Killam .....	$\frac{1}{2}$	6	6 do (to Sept. 30, '90).	10 00
do do .....	H. H. Keith .....	$\frac{1}{2}$	6	6 do from do ..	10 00
Caledonia, Turtle Creek and Railway Station .....	G. D. Reid .....	17 & $\frac{1}{2}$	2	12 do .....	97 96
Calhoun and Railway Station .....	T. B. Calhoun .....	$\frac{1}{2}$	12	12 do .....	25 00
Cameron's Mills and St. Louis de Kent .....	A. Babineau .....	10	2	9 do (to Dec. 31, '90).	71 25
do do .....	H. Landry .....	10	2	3 do from do ..	15 00
Campbell Settlement and Lower Southampton .....	J. C. Munro .....	6	2	6 do (to Sept. 30, '90).	22 74
do do .....	S. H. Stairs .....	6	2	6 do from do ..	24 86
Campbellton and Railway Station .....	G. Cummings .....	1	13	12 do (and extra trips).	207 69
Campo Bello and Wilson's Beach .....	J. Brown .....	7	1	9 do (to Dec. 31, '90).	56 25
do do .....	B. Brown .....	7	1	3 do from do ..	18 75
Canaan Station and Railway Station .....	J. J. Bernard .....	$\frac{1}{2}$	12	12 do .....	20 00
Canaan Station and Sweenyville .....	J. P. Bernard .....	8 & 12	2	12 do .....	80 00
Canobie and Clifton .....	W. Glendinning .....	3	1	12 do .....	30 00
Canterbury and Fredericton .....	R. H. Rainsford .....	51	3	10 do (from June 1, '90)	539 67
Canterbury and Woodstock .....	J. W. Scott .....	12	2	2 do (to May 31, '90).	24 67
do do .....	do .....	12	6	7 do (to Dec. 31, '90).	259 00
do do .....	G. W. Porter .....	12	6	3 do from do ..	70 00
Canterbury Station and North Lake .....	J. W. Dickinson .....	22	2	9 do (to Dec. 31, '90).	187 50
do do .....	H. Falconer .....	22	2	3 do from do ..	57 50
Canterbury Station and Ry. Station .....	J. S. Law .....	100 yds	12	12 do .....	50 00
Cape de Moisselle Creek and Railway Station .....	J. Wilson .....	$\frac{1}{8}$	12	12 do .....	25 00
Cape Spear and Railway Station .....	A. Seamon .....	5	2	7 do (from Sept. 1, '90)	24 26
Cape Tormentine and Ry. Station .....	J. R. Barry .....	200 ft.	12	8 do (from Aug. 1, '90)	10 00
Caraget and Lower Caraget .....	A. Lantaigne .....	4	3	12 do .....	34 00
Caraget and St. Simon .....	J. R. LeBoutillier .....	9	1	12 do .....	30 00
Caraget and Tracadie .....	P. Theriault .....	22	6	12 do .....	344 00
Carleton and St. John .....	D. O'Connell .....	1	36	12 do .....	138 00
Carleton and Street Letter Boxes .....	W. Lane .....	...	12	12 do .....	78 00
Carlisle and Lower Windsor .....	A. Albright .....	2	3	12 do .....	48 68
Central Blissville and Fredericton Junction .....	J. Shehan .....	4	2	12 do .....	55 00
Central Hampstead and Hibernia .....	D. Gardner .....	3	2	12 do .....	40 00
Central Waterville and Temperance Vale .....	G. T. Pinder .....	5	1	6 do (to Sept. 30, '90).	15 00
Centreville, Florenceville and Railway Station .....	I. N. Boyer .....	5	6	12 do .....	74 00
Centreville, Tracey's Mills & Greenfield .....	G. Gregg .....	2, 12			
Chamber's Settlement and Foster's Croft .....	T. Morisey .....	& 6	3 & 2	12 do .....	115 00
Chambord and Grand Falls .....	I. Michaud .....	5	1	12 do .....	29 00
Chance Harbour, Lepreaux and Little Lepreaux .....	U. J. Hope .....	4 & 6	1	12 do .....	50 00
do do .....	A. Hope .....	19 & 4	2 & 6	3 do (to June 30, '90).	60 40
Charleston and Middle Simonds .....	M. Mulhern .....	11	1	12 do .....	135 00
Charlo Station and Upper Charlo .....	P. Laviolette .....	2 $\frac{1}{2}$	6	12 do .....	50 00
Chatham and Douglasfield .....	T. King .....	5	1	12 do .....	20 00
Chatham and Kouchibouguac .....	R. McNaughton .....	26	2	12 do .....	258 00
Chatham and Railway Station .....	A. S. Ullock .....	1	24	12 do .....	200 00
Chatham and Tracadie .....	W. G. Ferguson .....	52	6	4 do (to July 31, '90).	426 66
do do .....	J. C. Coughlan .....	52	6	8 do from do ..	843 33

DETAIL of all payments for Mail Transportation in New Brunswick Postal Division, &c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Chipman and Harley Road .....	J. G. Brown .....	5	1	12 months .....	45 00
Chipman and Weldford Road .....	D. Robertson .....	40	1	12 do .....	235 00
Church Hill and Riverview .....	A. Bayley .....	2	2	12 do .....	26 00
Clarendon and Gaspereaux Station .....	W. H. Jones .....	6	2	12 do .....	59 00
Clarendon Station and Railway Station .....	G. S. Lacy .....	$\frac{1}{2}$	6	12 do .....	40 00
Clifton and Grey's Mills .....	J. Rodgers .....	10	6	12 do .....	244 00
Clifton and Lands End .....	O. M. Flewelling .....	22	2	12 do .....	272 80
Clinch's Mills and Gooseberry Cove .....	J. Ferguson .....	4	2	12 do .....	65 00
Clinch's Mills and Little Musquash .....	G. Wayne .....	5	2	12 do .....	40 00
Clinch's Mills and Railway Crossing .....	C. F. Clinch .....	$\frac{1}{2}$	12	12 do .....	26 00
Clover Hill and Sussex Vale .....	J. McLaughlin .....	$15\frac{1}{2}$	2	12 do .....	130 20
Coal Branch Station and Railway Station .....	J. T. Swift .....	100 yds	12	12 do .....	30 00
Coal Creek and Coal Mines .....	J. Brown .....	4	2	12 do .....	44 00
Coal Creek and Upper Coal Creek .....	M. E. Weaver .....	4	1	12 do .....	25 00
Cocagne and Cocagne Cape .....	J. S. Lucas .....	4	1	12 do .....	17 88
Cocagne and Notre Dame .....	E. Bilodeau .....	6	2	12 do .....	59 00
Coldbrook and Railway Station .....	E. Ryder .....	$\frac{1}{2}$	12	12 do .....	30 00
Cole's Island and Narrows .....	J. Cole .....	12	3	12 do .....	200 00
Cole's Island and New Canaan .....	A. Corey .....	23	1	12 do .....	98 00
College Bridge and Railway Station .....	D. F. Richard .....	$\frac{1}{2}$	12	12 do .....	75 00
Collina and Springfield .....	J. Kellier .....	14 & 10	1	12 do .....	42 00
Cork Station and Railway Station .....	M. A. Murphy .....	10 yds	3	12 do .....	16 00
Cormier's Cove and St. Joseph .....	D. A. Cormier .....	2	2	12 do .....	30 00
Corn Hill and Petitcodiac .....	W. W. Price .....	11 & 7	1	12 do .....	52 00
Cox's Point and Cumberland Bay .....	T. H. Branscombe .....	5	1	12 do .....	20 80
Cross Creek and Green Hill .....	W. Waugh .....	4	1	8 do (from Aug. 1, '90) .....	21 33
Curryville and Railway Station .....	J. A. Beaumont .....	$\frac{1}{2}$	12	12 do .....	30 00
Dalhousie and Point La Mim .....	P. Stewart .....	3	3	12 do .....	45 00
Dalhousie and Railway Station .....	H. A. Johnson .....	$\frac{1}{4}$	24	12 do .....	250 40
Dalhousie and Wharf .....	do .....	$\frac{1}{4}$	2	Season, 1890 .....	39 50
Dalhousie Junction and Railway Station .....	W. Jamieson .....	$\frac{1}{2}$	12	12 months .....	52 00
Dawson Settlement and Hillsborough .....	P. Broney .....	8	2	12 do .....	83 00
Debeck and Railway Station .....	A. Harron .....	$\frac{1}{2}$	12	12 do .....	30 00
Doaktown and Shinnickburn .....	J. McDuff .....	18	1	12 do .....	100 00
Donegal, Waterford and Sussex Vale .....	F. C. Buchanan .....	10 & 8	1 & 2	12 do .....	189 56
Dorchester and Fairview .....	A. Crossman .....	34	1	12 do .....	26 00
Dorchester and Middleton .....	R. W. Colpitts .....	2	6	12 do .....	65 00
Dorchester and Railway Station .....	S. W. Lingley .....	$\frac{3}{4}$	36	12 do and extra trips .....	432 50
Dorchester and Rockport .....	J. Read .....	12	3s, 2w	12 do .....	159 00
Dorchester and Woodhurst .....	B. Card .....	5	1	12 do .....	20 00
Dorchester Crossing and Railway Station .....	P. L. Belliveau .....	$\frac{1}{4}$	2	12 do .....	8 00
Dorchester Crossing and Scadouc .....	P. S. Pellerain .....	23	1	6 do (from Oct. 1, '90) .....	7 50
Dorn Ridge and Mouth of Keswick .....	J. Pugh .....	14	2	12 do .....	87 00
Douglastown and Newcastle .....	R. H. Grenley .....	5	6	12 do .....	125 00
Dover and Moncton .....	W. A. McFarlane .....	18	2	12 do .....	124 00
Downeyville and Springfield .....	W. Kellier .....	11	2	12 do .....	80 00
Downeyville and Tooleton .....	V. Vanwart .....	11 & 3	4	12 do .....	71 00
Doyle Settlement and River Louison .....	T. Hayes, jr. ....	3	1	12 do .....	20 00
Dumbarton Station and Railway Station .....	W. Sanders .....	$\frac{1}{16}$	3	12 do .....	20 00
Dundee and Shannon Vale .....	W. Wright .....	5	1	12 do .....	25 00
Dungiven and Memramcook .....	E. W. Toole .....	4	1	12 do .....	25 00
Dupey's Corner and St. André de Shediac .....	R. Hebert .....	$3\frac{1}{2}$	1	12 do .....	32 00
Edmundston and Grand Falls .....	M. Hartt .....	37	3	4 do 15 days (to Aug. 15, '90) .....	523 12
do do .....	do .....	37	6	7 do 16 dys. from do .....	934 38

DETAIL of all payments for Mail Transportation in New Brunswick Postal Division, &c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts
Edmundston and Mouth of St. Francis.....	L. Leveque.....	37	3	3 months (to June 30, '90)	128 47
do do.....	B. Leveque.....	37	3	9 do from do	367 50
Edmundston and Upper Madawaska	D. Sirois.....	3	6	12 do	24 00
El River Crossing and Railway Station.....	W. McNair.....	$\frac{1}{4}$	12	12 do	40 00
Elgin and Prosser Brook.....	W. P. Robinson.....	$\frac{1}{3}$	2	12 do	192 00
Elgin and Railway Station.....	J. D. Steeves.....	$\frac{1}{12}$	6	12 do	39 88
Elmsville and Railway Station.....	J. H. Dyer.....	$\frac{1}{12}$	6	12 do	40 00
Emigrant Road and Railway Station	M. Mulrine.....	$\frac{1}{12}$	3	12 do	30 00
Ennashore and Grand Falls.....	C. O'Regan.....	$\frac{3}{12}$	1	12 do	30 00
Enniskillen Station and Railway Station.....	B. McAloon.....	$\frac{1}{4}$	6	12 do	25 00
Fairhaven and Lord's Cove.....	T. McLaughlin.....	10	3s, 2w	12 do	195 00
Fairhaven and Steamer.....	do	1	3s, 2w	12 do	100 00
Fairville and Railway Station.....	C. J. Tilton.....	$\frac{1}{12}$	18	12 do	75 00
Fenwick and McKnight.....	J. R. Gamblin.....	$\frac{1}{12}$	2	12 do	15 00
Fenwick and Sheba.....	A. Simpson.....	$\frac{4}{12}$	2	12 do	33 00
Ferguson's Point and Intersection of					
Caraget and Chatham Route.....	W. Ferguson.....	$\frac{1}{12}$	6	12 do	21 20
Flatlands and Railway Station.....	J. Steeves.....	$\frac{1}{12}$	6	12 do	50 00
Florenceville and Railway Station.....	W. McMullin.....	1	12	12 do	185 00
Florenceville East and Riverbank	W. W. Boyer.....	4	3	6 do (to Sept. 30, '90).	28 00
do do.....	I. N. Boyer.....	4	3	6 do from do	28 50
Flume Ridge and Magaguadavic.....	M. Noonan.....	6	1	12 do	30 00
Forks and Ida.....	S. S. Clark.....	5	1	12 do	45 00
Four Falls and Ortonville.....	W. Downing.....	11	1	12 do	70 00
Fredericton and Hanwell.....	P. Lucy.....	10	1	6 do (to Sept. 30, '90).	29 74
do do.....	M. Curry.....	10	1	6 do from do	27 00
Fredericton and Street Letter Boxes	H. J. Phair.....		12	12 do	101 24
Fredericton and Lower St. Mary's.....	B. Dunphy.....	6	2	12 do	90 00
Fredericton and Marysville.....	T. Niles.....	4	6	12 do	149 00
Fredericton and Nasonworth.....	S. K. Nason.....	9 $\frac{1}{2}$	1	12 do	52 00
Fredericton and Railway Station.....	P. D. McKenzie.....		24	12 do	234 00
Fredericton and St. Mary's Ferry.....	M. W. Ryan.....		12	6 do (to Sept. 30, '90.)	40 00
do do.....	do		12	6 do from do	53 32
Fredericton and Tay Settlement.....	G. I. Gunter.....	27 $\frac{1}{2}$	1	3 do (to June 30, '90).	50 00
do do.....	S. Cook.....	27 $\frac{1}{2}$	1	9 do from do	142 50
Fredericton and Wisely.....	G. I. Gunter.....	4	2	12 do	50 00
Fredericton and Woodstock, East.....	J. Phillips.....	70	2	6 do (to Sept. 30, '90).	275 00
do do.....	N. Urquhart.....	70	2	6 do from do	275 00
Fredericton and Woodstock, West.....	R. H. Rainsford.....	63	3	2 do (to May 31, '90).	133 33
Fredericton Junction and Railway Station.....	J. Shehan.....	25 yds	24	12 do	40 00
French Village and Railway Station	C. Stephenson.....	4	2	12 do	50 00
Gagetown and Mouth of Nerepis.....	S. Cameron.....	45 $\frac{1}{4}$	3	12 do	692 25
Gagetown and Narrows.....	F. E. Wilson.....	19	3	12 do	270 00
Gagetown and Upper Gagetown.....	G. W. Allingham.....	8	3	12 do	100 00
Gagetown and Welsford.....	H. Johnston.....	28	3	12 do	470 00
Gagetown and White's Cove.....	W. Hamilton.....	13	3	12 do	250 00
Gailey and Thomas Gallands.....	J. White.....	2	2	12 do	30 00
Gaspereaux Station and Railway Station.....	P. W. Mooney.....	1	6	12 do	40 00
Gaythorne and Tabusintac.....	E. McCullum.....	4	1	12 do	30 00
Gillespie and Grand Falls Portage	J. McCallan.....	2	1	12 do	25 00
Gladstone and Kintore.....	T. Watt.....	8 $\frac{1}{2}$	3	12 do	120 00
Glassville and Ruth Glen.....	E. D. Martin.....	4	3	12 do	42 90
Golden Ridge and Knowlesville.....	G. Campbell.....	6	1	12 do	34 00
Goose Creek and Shepody Road.....	J. Prescott.....	13	1	12 do	60 00
Gouldville and Memramcook.....	J. Richard.....	2 $\frac{1}{2}$	2	12 do	35 00
Grafton and Woodstock.....	A. G. B. Stone.....	1 $\frac{1}{2}$	6	12 do	48 00
Grainfield and North Renous.....	M. Hayes.....	4	1	12 do	40 00



DETAIL of all payments for Mail Transportation in New Brunswick Postal Division, &c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Grand Anse and Mizonette .....	S. Theriault .....	8	2s, 1w	12 months .....	75 00
Grand Bay and Railway Station .....	D. Hamm .....	$\frac{1}{2}$	6	12 do .....	20 00
Grand Falls and Railway Station .....	J. J. Kelly .....	$\frac{1}{2}$	12	12 do .....	75 00
Grand Falls and Undine .....	F. Petit .....	16 & 11	2	12 do .....	133 00
Grand Falls and Woodstock .....	J. A. Perley .....	74	6	12 do .....	2,700 00
Grand Harbour and White Head .....	E. A. Daggett .....	6	2s, 1w	12 do .....	94 00
Grand Manan and Seal Cove .....	G. E. Lutton .....	12	$\frac{3}{2}$ & 2	12 do .....	119 00
Grattan and Upper Neguac .....	P. Grattan .....	$3\frac{1}{2}$	2	10 do (from June 1, '90)	33 33
Great Shemogue and Little Cape .....	J. S. Leger .....	4	1	12 do .....	25 00
Great Shemogue and Shediak .....	J. H. Hebert .....	24	6	12 do .....	400 00
Green Point and Petit Rocher .....	J. Morrison .....	$3\frac{1}{2}$	1	12 do .....	35 00
Halcomb and Lyttleton .....	E. Somers .....	5	1	12 do .....	39 00
Hammond Vale and Shepody Road .....	W. Fowler .....	12	1	12 do .....	164 00
Hampstead and Wickham .....	I. S. Van Wart .....	2	2	12 do .....	40 00
Hampton and Ossekeag .....	S. W. Sprague .....	1	6	12 do .....	60 00
Hampton and Urquharts .....	J. McLaughlan .....	13	2	12 do .....	130 00
Hardingville and Quaco Road .....	F. J. Johnston .....	4	1	12 do .....	29 00
Harewood and Salisbury .....	N. Wilson, jun. .....	13	1	12 do .....	46 80
Hainsville and Lewisville .....	C. F. Vincent .....	3	2	5 do (from Nov. 1, '90)	8 33
Hartland and Knowlesville .....	W. Macey .....	20	3	12 do .....	270 00
Hartland and Railway Station .....	A. Nevers, Ex- ecutrix .....	$\frac{1}{2}$	12	12 do .....	60 00
Harvey and Midway .....	R. Smith .....	$3\frac{1}{2}$	1	12 do .....	37 00
Harvey and Railway Station .....	L. F. West .....	$1\frac{1}{2}$	6	12 do .....	130 00
Harvey and Waterside .....	R. Smith .....	11	3	6 do (to Sept. 30, '90)	60 00
do do .....	R. Mulligan .....	11	3	6 do from do .....	73 50
Harvey Station and Magaguadavic .....	T. Craig .....	18	2	12 do .....	149 00
Harvey Station and Railway Station .....	D. Glendinning .....	50 yds	12	12 do .....	30 00
Harvey Station and Yoho .....	J. F. Petty .....	8	1	6 do (to Sept. 30, '90)	14 38
do do .....	R. Coffey .....	8	1	6 do from do .....	24 00
Hatfield Point and West Scotch Settlement .....	W. A. S. Perkins .....	4	1	12 do .....	22 00
Head of Millstream and Perry Settlement .....	B. B. Hayes .....	5	1	12 do .....	30 00
Head of Millstream and Sussex Vale do .....	do .....	19	2	12 do .....	175 00
Head of Tide and Railway Station .....	J. Gillis .....	$1\frac{1}{4}$	6	3 do (to June 30, '90)	12 50
do do .....	H. C. Gillis .....	$1\frac{1}{4}$	6	9 do from do .....	60 00
Head of Tide and Robinsonville .....	D. Duncan .....	$19\frac{1}{2}$	1	12 do .....	99 25
Heron Island and New Mills .....	W. Maxwell .....	3	1	12 do .....	32 00
Hillsborough and Lower Cape .....	S. S. Calhoun .....	9	6	12 do .....	200 00
Hillsborough and Railway Station .....	R. E. Steves .....	$\frac{1}{2}$	12	12 do .....	78 00
Hillsborough and Rose Vale .....	H. J. Stevens .....	13	13	9 do (to Dec. 31, '90)	105 00
do do .....	W. J. Bayley .....	13	3	3 do from do .....	33 00
Hillsdale and Mackville .....	J. McIntyre .....	3	1	12 do .....	23 68
Hillsdale and Sussex Vale .....	R. Brewing .....	17	3	9 do (to Dec. 31, '90)	180 00
do do .....	W. P. Buchanan .....	17	3	3 do from do .....	59 25
Hopewell Cape and Railway Station .....	W. E. Calhoun .....	$3\frac{1}{2}$	6	12 do .....	90 00
Hopewell Hill, Hopewell and Rail- way Station .....	C. L. Peck .....	$1\frac{1}{2}$	6 & 12	12 do .....	80 00
Hopewell Hill and Memel .....	W. Hunt .....	$7\frac{1}{2}$	1	12 do .....	50 00
Hopper and Salisbury .....	J. McGee .....	18	1	12 do .....	82 00
Hoyt Station and Juvenile Settle- ment .....	J. E. Patterson .....	12 & 9	2	12 do .....	75 88
Hoyt Station and Railway Station .....	A. W. Mersereau .....	$\frac{1}{2}$	12	12 do .....	50 00
Indian Mountain and Moncton .....	A. M. Bunnell .....	14	1	12 do .....	78 00
Indiantown and St. John .....	D. O'Connell .....	2	12	12 do (and arrears) ..	206 00
Inkerman and Railway Station .....	W. Gibbs .....	3	6	12 do .....	45 00
Irishtown and Shediak .....	C. Sullivan .....	20	1	12 do .....	126 00
Jenkins and Thornetown .....	M. B. Perry .....	2	3	12 do .....	38 00
Jolicure, Westmoreland Point and Railway Station .....	C. Wry .....	7 & 1	6 & 12	12 do .....	225 00

DETAIL of all payments for Mail Transportation in New Brunswick Postal Division, &c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Jordan Mountain and Newtown...	S. H. Snider....	4	1	3 months (to June 30, '90)	9 50
do do	E. W. Marr....	4	1	9 do from do	21 00
Keats and Petitcodiac..	R. F. Keith....	7	3	12 do	117 00
Kerry and New Ireland Road..	J. Garland....	5	1	12 do	49 48
Keswick Ridge and Millville....	J. Harrigan....	27 & 30	2	12 do	295 87
Kilburn and Kintore....	D. Watt....	6	3	12 do	80 00
Kilburn and Railway Station....	B. Kilburn....	$\frac{1}{8}$	12	12 do	32 50
Kingsclear and New Market....	J. W. Howard....	5	1	12 do	36 00
Kingston (Kent) and R'y Station..	E. Harnett....	$\frac{1}{2}$	12	12 do	100 00
Kingston (Kent) and Richibucto Village.	P. McCaie....	7	2	12 do	60 00
Kingston (Kings) and Perry's Point	J. Hill....	2 $\frac{1}{2}$	2	12 do	35 00
Kingston (Kings) and Rothesay...	S. Cosman....	10	6	12 do	449 00
Knoxford and Upper Knoxford...	R. Langstaff....	4	1	12 do	26 00
Kouchibouguac and Kouchibouguac Beach.	J. Potter, jun....	9	2	12 do	60 00
Kouchibouguac and Point Sapin...	do	20	1	12 do	65 00
Kouchibouguac and Richibucto....	J. McLane....	12	6	12 do	290 00
Lake George and Prince William Station...	P. Carr....	22	2	12 do	157 00
Lakeview and Narrows	R. Black....	3	3	12 do	50 00
Lakeville Corner and Junction of Briggs Corner and Sheffield Route	F. McGowan....	$\frac{1}{2}$	2	9 do (to Dec. 31, '90)	7 50
Lakeville Corner and Newcastle Creek.	T. L. Simmons....	28	2	9 do (to Dec. 31, '90)	129 00
do do	G. W. Byno....	28	2	3 do from do	42 75
Landry and Pockmouche	M. Landry....	5	1	12 do	23 00
Lawrence Station and R'y Station..	J. Taylor....	200 yds	12	12 do	52 00
Ledge and St. Stephen....	J. Greene....	4	3s, 1w	12 do	75 00
Legere and Portage River....	L. Mauzerall....	2	3	12 do	30 00
Lepreaux and Pocologan....	S. T. Anderson....	10	2	12 do	75 00
Lepreaux and Railway Station....	H. P. Reynolds....	$\frac{1}{2}$	12	12 do	25 00
Lewis Mountain and Petitcodiac...	W. W. Price....	12 & 13	1	12 do	72 80
Lime Hill and Junction Springhill Road.	T. Scribner....	2	1	12 do	15 00
Limekiln and Stanley....	H. Turnbull....	2	1	12 do	25 00
Lincoln and Oromocto....	A. E. Bulley....	4	3	12 do	65 00
Little Lake and Tracey Station....	J. Steen....	11	1	12 do	58 00
Little Salmon River Mills and Shepody Road	G. J. Vaughan....	8	1	12 do	80 00
Loch Lomond and St. Martins....	Fownes & Tabor	20	1	12 do	100 00
Lorwick and Junction of Perth Centre and Tilley Route....	H. Dougherty....	$\frac{3}{4}$	1	12 do	5 92
Long Point and Springfield....	W. Kellier....	7 & 10	1	12 do	35 44
Long Settlement and Woodstock...	J. R. Tupper....	26	2	12 do	204 88
Lower Brighton, Newburgh and Pembroke, &c....	J. Downey....	3, $\frac{1}{2}$ & 2	6, 3 & 2	12 do	129 17
Lower Nappan and Point au Car...	A. McKnight....	5	2	12 do	47 48
Lower Southampton and Norton Dale	J. C. Munro....	10	2	6 do (to Sept. 30, '90)	44 24
do do	H. Stairs....	10	2	6 do from do	57 50
Lower Turtle Creek and Turtle Creek	G. A. Fillmore....	3	1	12 do	15 00
Lower Woodstock and Speersville...	A. W. Hay....	6	1	3 do (to June 30, '90)	14 55
Lyttleton and Red Bank....	E. Somers....	5	3	12 do	90 00
McGinley and Memramcook....	G. C. Charters....	14	3	12 do	40 00
Maple Green and Railway Station..	J. Fraser....	1	3	12 do	45 00
Maplehurst, Upper Kent and Railway Station	A. Hawthorn....	3 & $\frac{1}{2}$	2 & 12	12 do	100 00
Maple Ridge and Millville....	G. Russell....	3	1	12 do	20 00
Maplewood and Millville....	H. Pahner....	5	1	12 do	40 00
Mars Hill and River de Chute....	J. B. Porter....	5	1	6 do (from Oct. 1, '90)	12 50
Martin's Head and Salmon River...	W. J. Davidson....	15	2	Season, 1890	50 00

DETAIL of all payments for Mail Transportation in New Brunswick Postal Division, &c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Maugerville and Upper Maugerville	P. McCluskey ..	5	3	Season, 1890.....	45 00
Meadows and Railway Station....	G. F. Beach.....	20 yds	12	12 months .....	10 00
Melrose and Railway Station .....	B. Corrigan.....	6	12	do .....	26 00
Memramcook and Railway Station...	G. C. Charters ..	36	12	do .....	150 00
Midgie Station and Railway Station	C. Hicks .....	40 yds	6	12 do (and arrears)...	10 83
Milford and Railway Station .....	J. Irvine.....	1½	12	12 do .....	75 00
Milledgeville and St. John .....	D. O'Connell.....	4	2	12 do .....	65 00
Millstream and Mountain Dale....	W. E. Fenwick..	6 & 7	1	12 do .....	46 28
Millstream and Mount Hebron....	G. D. Fenwick..	5	1	12 do .....	41 08
Milltown and St. Stephen .....	Keys Bros .....	2	12	12 do .....	148 48
Milltown and Upper Mills .....	J. M. McDonald ..	3	1	12 do .....	50 00
Miscou Harbour and Wilson's Point	J. A. Wilson .....	6	2s, 1w	12 do .....	60 36
Mispec and St. John .....	D. O'Connell.....	9	1	12 do .....	59 76
Moncton and Brigade Camp .....	W. G. Cochrane..	.....	.....	Special service.....	6 00
Moncton and O'Neil .....	J. McQuade.....	15	1	9 months (to Dec. 31, '90)	44 25
do do .....	R. Lowry.....	15	1	3 do from do .....	16 25
Moncton and Railway Station .....	G. McSweeney....	1	48	12 do (and extra trips).	517 50
Moncton and Stony Creek .....	J. Scott.....	8	2	12 do .....	115 00
Moncton and Street Letter Boxes...	J. Gallagher.....	1	12	12 do .....	150 00
Moncton and Upper Coverdale .....	E. L. Goodhall...	14	2	12 do .....	105 00
Moncton Road and Shediac .....	W. G. Bateman....	6	1	12 do .....	40 00
Monument Settlement and Richmond Corner	N. Turney.....	27 & 20	2	12 do .....	228 00
Moore's Mills and Railway Station.	A. Connick.....	100 yds	12	12 do .....	52 00
Mount View and Upper Sackville..	J. Wheaton.....	3	1	12 do .....	20 00
Mountville and Railway Station .....	J. Wilbur.....	100 yds	12	9 do (to Dec. 31, '90).	15 00
do do .....	J. T. Wilbur.....	300 yds	12	3 do from do .....	5 00
Mouth of Nerepis and Ry. Station...	J. M. Nase.....	¾	12	12 do .....	50 00
Musquash and Railway Station....	L. D. Carman....	1¼	12	12 do .....	26 00
Narrows, Norton Station and Springfield	W. Linden.....	9 & 21	6 & 3	12 do .....	512 36
Narrows and Upper Gaspereaux....	J. B. Wiggins ..	50	3	12 do .....	700 00
Narrows and Wickham .....	G. W. Day.....	24	3	12 do .....	350 00
Nauwigewauk and Railway Station.	W. W. Dodge ..	1¼	12	12 do .....	25 00
Nerepis Station and Railway Station	D. McKenzie.....	2½	12	12 do .....	20 00
Nerepis Station and Round Hill .....	do .....	12	1	12 do .....	100 00
Newcastle and Railway Station....	R. H. Gremley....	1	24	12 do (and extra trips).	217 00
Newcastle and Red Bank .....	J. C. Millar.....	15	3	12 do .....	295 00
Newcastle and Renous Bridge .....	J. C. Brown.....	17	3	12 do .....	275 00
Newcastle and Sevogle .....	do .....	25	1	12 do .....	145 00
Newcastle and South Nelson .....	J. Doolan, jun..	2	6	12 do .....	199 00
New Mills and Railway Station .....	A. McNair.....	¼	12	12 do .....	49 88
Newtown and Sussex Vale .....	J. Rogers.....	12 & 10	3	9 do (to Dec. 31, '90).	85 86
do do .....	J. Cotter.....	10 & 12	3	3 do from do .....	45 00
Newtown and White's Mountain...	H. Jamieson....	3	1	12 do .....	30 00
Nictau and Riley Brook .....	E. P. Ross.....	6	1	12 do .....	30 00
Nigado and Petit Rocher .....	F. Walsh.....	5½	1	12 do .....	40 00
Nixon and Turtle Creek .....	L. A. Wilson.....	4	2	12 do .....	31 25
North Forks Salmon Creek and Salmon Creek .....	S. P. Fowler....	4	1	12 do .....	37 40
North River Platform and Railway Station	T. Jones.....	¾	12	12 do .....	25 00
Notre Dame and Poirier .....	F. Cyr.....	6	1	12 do .....	30 00
Oak Bay and Railway Station .....	R. W. Wilson ..	¼	12	12 do .....	65 00
Oakham and Thornetown .....	E. Perry.....	4	2	12 do .....	42 48
Oak Hill and St. Stephen .....	Keys Bros .....	22	1	12 do .....	159 00
Oak Point and Round Hill .....	D. D. Flewelling	3	6	Season, 1890 .....	34 00
Oakville and Richmond Corner....	L. S. Purinton..	10	1	12 months .....	80 00
Olinville and Speights Corner .....	A. F. Speight....	2½	2	12 do .....	15 00
Oromocto, Sheffield, Upper Gagetown and Swan Creek .....	J. Malone.....	10, 21 & 12	6 & 3	12 do .....	320 00



DETAIL of all payments for Mail Transportation in New Brunswick Postal Division, &c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No of Trips per Week.	Period.	Amount.
					\$ cts.
Oromocto and Waasis Station . . .	J. Malone . . . . .	6	6	12 months . . . . .	190 00
Oromocto and Woodside . . . . .	W. Rutledge . . . . .	18	2	12 do . . . . .	109 00
Ossekeag and Upperton . . . . .	R. W. Barnes . . . . .	19½	2	12 do . . . . .	180 00
Painsec Settlement and Ry. Station	E. Babin . . . . .	1	2	12 do . . . . .	32 00
Passekeag and Railway Station . .	G. R. Campbell . . . .	150yds	12	12 do . . . . .	50 00
Passekeag and Sherlock . . . . .	J. McVey . . . . .	5	1	12 do . . . . .	40 00
Pearson's and Starkeys . . . . .	J. H. McLeod . . . . .	9 & 12	2	12 do . . . . .	150 00
Pennfield Ridge and Ry. Station . .	S. McKay . . . . .	2	6	12 do . . . . .	60 00
Penobscus and Roxburgh . . . . .	J. J. Haslam . . . . .	21	2	12 do . . . . .	177 48
Perth Centre and Railway Station . .	G. W. Larlee . . . . .	½	12	12 do . . . . .	50 00
Perth Centre and Riley Brook . . . .	W. Inman . . . . .	64 & 8	2 & 1	6 do (to Sept. 30, '90).	300 60
do do . . . . .	do . . . . .	72	2	6 do from do . . . . .	318 10
Perth Centre and Tilley . . . . .	N. Demerchant . . . . .	16	2	12 do . . . . .	127 00
Petersville and Welsford . . . . .	P. Lingley . . . . .	10	2	12 do . . . . .	96 00
Petersville Church and South Clones	J. Chittick, sen. . . . .	4	1	12 do . . . . .	30 00
Petit Rocher and Railway Station . .	J. Morrison . . . . .	1½	12	12 do . . . . .	75 00
Pioneer and Woodstock . . . . .	J. R. Tupper . . . . .	25	3	12 do . . . . .	297 00
Pisarinco and Spruce Lake Station . .	E. McCarthy . . . . .	4	3	12 do . . . . .	40 00
Pleasant Ridge and Rolling Dam Station . . . . .	N. McDermott . . . . .	10	2	12 do . . . . .	75 00
Point du Chene and Railway Station	E. McDonald . . . . .	½	12	12 do . . . . .	25 00
Pollett River and Railway Station . .	T. W. Colpitts . . . . .	100yds	3	12 do . . . . .	19 48
Port Elgin and Railway Station . . .	G. Siddall . . . . .	¼	12	12 do . . . . .	40 00
Port Elgin and Spence . . . . .	J. H. Grant . . . . .	17 & 15	3	12 do . . . . .	273 00
Prince of Wales and Ry. Crossing . .	J. Cairns . . . . .	½	6	12 do . . . . .	31 00
Prince William Station and Railway Station . . . . .	W. G. Hatch . . . . .	1/8	12	12 do . . . . .	80 00
Prince William Station and York Mills . . . . .	W. Murray . . . . .	3	2	12 do . . . . .	93 00
Queenstown and Upper Otnabog . . .	A. C. Fox . . . . .	2½	3	1 do 13 dys (from Feb. 16, '91) . . . . .	2 75
Read and Railway Station . . . . .	E. Read . . . . .	2½	2	12 do . . . . .	31 20
Renous Bridge and South Renous . .	J. Singleton . . . . .	5½	2	9 do (to Dec. 31, '90) . . . . .	31 50
do do . . . . .	W. Hogan . . . . .	5	2	3 do from do . . . . .	13 75
Reynolds and South Nelson . . . . .	B. Reynolds . . . . .	7	2	12 do . . . . .	50 00
Richibucto and Railway Station . . .	J. C. Vantour . . . . .	¼	6	12 do . . . . .	75 00
Richibucto, Weldford and Railway Station . . . . .	L. J. Wathen . . . . .	27 & 1/8	6 & 24	12 do . . . . .	901 00
River Charlo and Railway Station . .	W. R. Jamieson . . . .	1	12	12 do . . . . .	100 00
River Louison and Sunnyside . . . .	J. Miller . . . . .	7	1	3 do (to June 30, '90) . . . . .	11 50
do do . . . . .	W. D. Miller . . . . .	7	1	9 do from do . . . . .	25 50
Riverside and Railway Station . . . .	M. Daley . . . . .	1/8	12	3 do (to June 30, '90) . . . . .	6 00
do do . . . . .	S. Edgett . . . . .	1/8	12	9 do from do . . . . .	26 25
Rockland, Rockland Station and Railway Station . . . . .	J. Sutherland . . . . .	4, 5/8 & 1/16	6 & 12	12 do . . . . .	262 04
Rockport and Sackville . . . . .	A. Tower . . . . .	16	1	12 do . . . . .	65 00
Rogerville and Railway Station . . .	D. Fontaine . . . . .	100yds	12	12 do . . . . .	25 00
Rogerville and Rogerville East . . . .	J. Haché . . . . .	4½	1	12 do . . . . .	43 88
Rogerville and Viennau . . . . .	F. McCaile . . . . .	5	1	12 do . . . . .	35 00
Rolling Dam Station and Ry. Station	W. Goodill . . . . .	1/8	12	12 do . . . . .	40 00
Rosedale and Upper Woodstock . . .	W. E. Hoyt . . . . .	8 & 6	2	12 do . . . . .	80 00
Rusagornis and Waasis Station . . . .	A. Grass . . . . .	3	3	12 do . . . . .	40 00
St. Andrews and Railway Station . .	J. Cummings . . . . .	1/3	As req	12 do . . . . .	78 80
St. Andrews and Wharf . . . . .	R. Storr . . . . .	1/3	4 & 6	12 do . . . . .	32 00
St. Croix and Railway Station . . . .	J. E. Casey . . . . .	1	6	12 do . . . . .	45 00
St. George and Railway Station . . . .	M. Parks . . . . .	1	12	12 do . . . . .	68 00
St. Isidore and Tracadie . . . . .	P. LeBreton . . . . .	11	2	12 do . . . . .	70 00
St. John and Railway Stations . . . .	D. O'Connell . . . . .	1/2	30 & 48	12 do (and extra trips) . . . . .	1,370 30
St. John and Shore Line Ry. Station	J. Moulson . . . . .	1	6	12 do . . . . .	125 00
St. John and St. Martins . . . . .	Fownes & Tabor . . . .	30	6	12 do . . . . .	1,429 40

DETAIL of all payments for Mail Transportation in New Brunswick Postal Division, &c—*Concluded.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
St. John and Sand Point Road....	D. Peacock.....	3	3	12 months.....	40 00
St. John and Street Letter Boxes..	D. O'Connell....	18	12	do.....	489 00
St. John and Wells.....	do.....	19 & 11	1	12 do.....	95 00
St. John and Wharf.....	M. Crowley.....			Special trips.....	1 40
St. Joseph and Railway Station....	J. E. Gaudet....	1	12	12 months.....	84 00
St. Leonard Station and Van Buren, U.S.....	A. L. Coombes... 1	6	12	do.....	50 00
St. Martins and Salmon River.....	A. W. Fownes... 9	3 & 2	12	do.....	168 29
St. Norbert and West Branch.....	D. Gallant..... 5	1	12	do.....	19 48
St. Stephen and Calais, U.S.....	Keys Bros..... 1	12	12	do.....	110 00
St. Stephen and Canadian Pacific Railway Station.....	Hardy & Bridges	$\frac{1}{2}$	12	12 do (and arrears) ...	218 70
St. Stephen and Shore Line Railway Station.....	J. Greene..... 1	6	12	do.....	69 00
St. Stephen and Wharf.....	Hardy & Bridges	1	As req	12 do (and extra trips).	78 50
Sackville and Intercolonial Railway Station.....	J. I. Wheaton .. 1	36	12	do.....	300 00
Sackville and N. B. & P. E. I. Railway Station.....	N. B. & P. E. I. Ry. Co. ....	$\frac{1}{2}$	6	12 do.....	25 00
Sackville and Second Westcock ..	C. Doo..... 8	1	12	do.....	49 00
Sackville and Upper Sackville.....	J. I. Wheaton... 5	6	12	do.....	118 72
Sackville and Wood Point.....	E. Snowden..... 6	1	12	do.....	24 48
Salisbury and Railway Station....	G. W. Gaynor... 600 yds	36	12	do.....	225 00
Salt Springs and Titusville.....	H. O'Brien..... 6	2	12	do.....	56 00
Sargent and Junction Bay du Vin and Point Escuminac Route.....	H. Sargent..... 1	2	12	do.....	20 00
Shediac and Railway Station.....	C. W. Smith.... $\frac{1}{2}$	42	12	do.....	219 10
Shediac Road and Railway Station.	G. Rodgerson... 1 $\frac{1}{2}$	3	12	do.....	36 50
Shippigan and Shippigan Island....	J. Goodin..... 12	2s, 1w.	12	do.....	60 00
South Bay and Railway Station....	W. Roxborough. 100 yds	12	12	do.....	30 00
South Nelson and South Nelson Road do do.....	W. Gorman..... 3	2	9	do (to Dec. 31, '90).	41 25
do do.....	H. Getchele.... 3	2	3	do from do ..	13 75
South New Bridge and Woodstock.	W. Tompkins... 4 $\frac{1}{2}$	2	12	do.....	50 00
Spruce Lake and Railway Crossing.	J. Robinson.... $\frac{1}{3}$	6	12	do.....	30 00
Spruce Lake Station and Ry. Station	E. McCarthy.... $\frac{1}{15}$	6	12	do.....	20 00
Stanley and Cross Creek Ry. Station	T. Coughlan.... 6	6	12	do.....	156 00
Stanley and Williamsburgh.....	T. Sanson..... 6	1	4	do (to July 31, '90)..	20 00
Starkeys and Young's Cove.....	S. J. Thorne.... 11	1	12	do.....	36 00
Stynast Settlement and Upper Neguac.....	P. Grattan..... 5	2	2	do (to May 31, '90).	9 58
Summerfield and Upper Wicklow ..	A. Gee..... 3	2	3	do (to June 30, '90).	6 25
do do.....	D. Gee..... 3	2	9	do from do ..	26 25
Sussex Corner and Sussex Vale.....	J. Rogers..... 2	6	12	do.....	43 68
Sussex Vale and Railway Station ..	R. D. Boal..... 250 yds	42	12	do.....	210 00
Tapley's Mills and Railway Crossing	M. Murray..... $\frac{1}{15}$	2	12	do.....	35 00
The Range and Wiggins.....	A. F. Barton.... 2 $\frac{1}{2}$	1	12	do.....	28 00
Three-Tree Creek and Ry. Station..	J. McQuestion.. $\frac{1}{4}$	6	12	do.....	15 00
Tower Hill and Railway Station...	J. Irons..... 2	2	12	do.....	50 00
Tracey Station and Railway Station	D. S. Duplisea.. 50 yds	12	12	do.....	30 00
Tracey Station and Traceyville....	do..... 4	1	12	do.....	30 00
Upper Cape and Railway Station...	A. Raworth.... 3	3	12	do.....	39 00
Waveford and Railway Station.....	M. J. Greenlaw.. $\frac{1}{15}$	6	12	do.....	60 00
Welsford and Railway Station.....	H. W. Wood.... $\frac{1}{8}$	12	12	do.....	100 00
Woodstock and Railway Station....	J. R. Tupper.... $\frac{1}{8}$	36	12	do.....	231 60
Woodstock and Houlton, U.S.....	F. A. Glidden .. 14	6	12	do.....	490 00
Total.....					\$55,336 86

W. H. SMITHSON,  
Accountant.

WILLIAM WHITE,  
Deputy Postmaster-General.

## NOVA SCOTIA POSTAL DIVISION.

DETAIL of all payments for Mail Transportation in Nova Scotia Postal Division,  
made within the Year ended 30th June, 1891.

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Abercrombie and New Glasgow....	R. Dunbar.....	5	2	12 months	68 00
Acadia Mines and Bass River .....	J. W. Davidson.	14	3	12 do	197 48
Acadia Mines and Londonderry Station .....	A. J. Gough.....	23 <sup>3</sup> / <sub>4</sub>	24	12 do	175 00
Addington Forks and Keppoch.....	D. Campbell.....	7 <sup>1</sup> / <sub>2</sub>	1	12 do	60 00
Advocate Harbour and Apple River .....	J. W. Ward.....	10	6	12 do	345 00
Afton and Bayfield.....	M. Connor.....	21 <sup>1</sup> / <sub>2</sub>	6	12 do	100 00
Afton and Bayfield Railway Station .....	do	12	12	12 do	65 00
Afton and Guysboro Intervale.....	A. Chisholm.....	15	1	6 do (to Sept 30, '90).	27 50
do do .....	D. S. Ferguson..	15	1	6 do from do	28 48
Albert Bridge and Horn's Road.....	H. Horn.....	4	1	12 do	20 00
Alderney and Petit De Grat.....	W. Landry.....	21 <sup>2</sup> / <sub>2</sub>	3	12 do	62 48
Alder Point and Little Bras d'Or.....	P. H. Stubbart..	6	1	6 do (to Sept. 30, '90).	17 50
do do .....	C. Stubbart.....	6	1	6 do from do	17 50
Alder River and Main Post Road .....	J. Chisholm.....	1	12	12 do	12 00
Alton and Railway Station .....	B. Lindsay.....	75 yds	6	12 do	20 00
Amherst and Amherst Point.....	I. B. Stewart.....	4 <sup>1</sup> / <sub>2</sub>	3	12 do	67 00
Amherst and Fenwick.....	W. Pipes.....	6	1	12 do	32 00
Amherst and Hastings.....	E. Chapman.....	6	1	12 do	40 00
Amherst and Linden.....	K. Hunter.....	20	3	12 do	210 00
Amherst and Little River.....	G. A. Purdy.....	22 <sup>3</sup> / <sub>4</sub>	2	12 do	240 00
Amherst and Railway Station.....	C. T. Hillson.....	1 <sup>1</sup> / <sub>4</sub>	as req.	12 do	506 88
Amherst and Tidnish .....	W. Blair.....	16	3	12 do	225 00
Amherst Station—Letter Box and Postal Cars.....	C. T. Hillson.....	30 yds	36	12 do	25 00
Annapolis and Dalhousie West.....	J. Gornley.....	16	1	12 do	100 00
Annapolis and Digby.....	R. H. Hardwick	21	6	12 do	522 00
Annapolis and Granville Ferry.....	W. H. Weather- spoon.....	1	6	12 do	250 00
Annapolis and Liverpool.....	G. & E. Stailing.	67	6	12 do	2,399 00
Annapolis and Perrott Settlement.....	N. Dargie.....	9	1	6 do (to Sept. 30, '90).	22 50
do do .....	T. Goldsmith.....	9	1	6 do from do	27 50
Annapolis and Railway Station.....	A. W. Corbitt.....	1 <sup>1</sup> / <sub>2</sub>	12	12 do	112 00
Annapolis and Saw Mill Creek.....	R. Harris.....	3 <sup>1</sup> / <sub>2</sub>	3	12 do	70 00
Antigonishe and Arisaig, &c. ....	McDonald & Gil- lis.....	7 & 10	2 & 1	12 do	145 00
Antigonishe and Brophy's.....	T. Brophy.....	14	2	12 do	132 00
Antigonishe and Cloverville.....	J. Thompson.....	5	1	12 do	40 00
Antigonishe and Georgeville.....	R. McDonald.....	44 r. t.	4	12 do	398 00
Antigonishe and Lower West River .....	T. McAnnis.....	3 <sup>1</sup> / <sub>2</sub>	2	12 do	52 00
Antigonishe and Railway Station.....	W. G. Cunning- ham.....	3 <sup>1</sup> / <sub>2</sub>	12	12 do	106 66
Antigonishe and Sherbrooke.....	M. McGrath.....	40	3	12 do	1,119 28
Antigonishe and Williams Point.....	D. McDonald.....	21 <sup>1</sup> / <sub>2</sub>	2	12 do	40 00
Antigonishe Harbour (South Side) and Lower Settlement South River .....	J. Kiely.....	41 <sup>1</sup> / <sub>2</sub>	2	12 do	100 00
Antigonishe Station—Letter Box and Postal Cars.....	W. G. Cunning- ham.....	20 yds	12	8 do 20 days (from July 12, '90) ..	14 40
Anthony's Line and Scotch Village.....	S. Cochran.....	11 r. t.	2	12 do	55 00
Antrim and Gay's River.....	W. Blades.....	16 r. t.	2	12 do	75 00
Apple River and East Apple River.....	J. H. Copp.....	3	6	12 do	50 00
Arcadie and East Chebogue.....	W. W. Coffrin.....	4	2	12 do	40 00
Ardness and Lismore.....	A. McDonald.....	3	3	12 do	50 00
Ardoise Hill and Newport Station.....	M. Harvey.....	19 r. t.	6	12 do	135 00
Argyle and Argyle Head.....	A. J. Nickerson..	2	3	12 do	50 00
Argyle Sound and Lower Argyle.....	E. Murphy.....	3 <sup>1</sup> / <sub>2</sub>	1	12 do	19 00
Arichat and Lennox Ferry.....	A. Martell.....	5	4	Season 1890.....	50 00
Arichat and Petite de Grat.....	A. McDonald.....	3	3	12 months	90 00



DETAIL of all payments for Mail Transportation in Nova Scotia Postal Division,  
&c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Arichat and Robins.....	F. L. Malzard.....	4	6	12 months.....	70 00
Arichat and West Arichat.....	A. McDonald.....	3	6	Season 1890.....	18 75
Arlington and Canning.....	R. Wood.....	5	2	12 months.....	30 00
Ashfield and Whycomagh.....	H. McDonald.....	6	1	12 do.....	24 00
Aspen and Glenelg.....	J. McGrath.....	4	3	12 do.....	42 48
Aspen and New Glasgow.....	J. Fraser.....	43	3	12 do.....	694 00
Athol and Railway Station.....	E. Donkin.....	1	12	12 do.....	100 00
Auburn and Greenwood.....	G. W. Eaton.....	6½ r. t.	1	12 do.....	30 00
Auburn and Railway Station.....	J. M. Smith.....	4	12	6 do (to Sept. 30, '90).....	21 50
do do.....	G. O. Jacques.....	4	12	6 do from do.....	35 00
Auld's Cove and Railway Station.....	H. McMillan.....	1½	6	12 do.....	55 00
Avondale Station and Ry. Station.....	A. F. Robertson.....	1½	12	12 do.....	25 00
Avonport and Avonport Station.....	J. B. Newcomb.....	1½	6	12 do.....	100 00
Avonport Station and Ry. Station.....	do.....	12 yds	12	12 do.....	30 00
Aylesford and Bridgewater.....	M. N. Graves.....	60	1	12 do.....	224 00
Aylesford and Harmony.....	A. D. Nichols.....	20 r. t.	1	12 do.....	57 00
Aylesford and Morden.....	W. J. Balcom.....	22 r. t.	2	12 do.....	108 00
Aylesford and Railway Station.....	C. A. Williamson.....	4	12	12 do.....	60 00
Baccaro and Port La Tour.....	W. P. Snow.....	3	2	12 do.....	39 00
Back Meadows and Poplar Hill.....	G. Clark.....	4	2	12 do.....	40 00
Baddeck and Big Bras d'Or.....	A. Matheson.....	26	3	12 do.....	523 00
Baddeck and Grand Narrows.....	F. H. S. McNeil.....	15	1	12 do.....	65 72
Baddeck and New Campbellton.....	M. D. McInnis.....	32	3	12 do.....	425 60
Baddeck and Rear Baddeck Bay.....	M. A. McKay.....	8	1	12 do.....	52 00
Baddeck and Upper Settlement					
Baddeck Bay.....	D. N. Morrison.....	16	2	12 do.....	69 72
Baddeck and Upper Settlement					
Middle River.....	A. G. Crowdis.....	19	2	12 do.....	143 00
Baddeck Bay and Plaister Mines.....	H. Fraser.....	4	2	12 do.....	27 00
Baddeck River, North Branch, and					
Forks Baddeck.....	D. Buchanan.....	2½	2	12 do.....	28 00
Baie Verte and Linden.....	S. Moore.....	16 & 5	3 & 2	12 do.....	230 00
Bailey's Brook and Railway Station.....	A. McLean.....	4½	6	12 do.....	125 24
Baker Settlement and Greenfield.....	A. Baker.....	8 & 5	3 & 1	12 do.....	115 00
Balmoral Mills and The Falls.....	A. McKay.....	2½	3	12 do.....	56 00
Banks Broad Cove and Strathlorne.....	L. McDougall.....	4	1	12 do.....	15 00
Barney's River and Marsh.....	G. Campbell.....	18 r. t.	1	3 do (to June 30, '90).....	9 74
do do.....	J. McIver.....	18 r. t.	1	9 do from do.....	36 75
Barney's River and Railway Station.....	D. R. McKenzie.....	4½	6	12 do.....	133 88
Barney's River and Rossfield.....	G. Campbell.....	4	1	12 do.....	20 00
Barrington and Port Clyde.....	G. K. Hogg.....	30 r. t.	6	12 do.....	330 00
Barrington and Pubnico Beach.....	do.....	22	6	12 do.....	530 00
Barrington and Shelburne.....	T. E. Ryer.....	23	6	6 do (to Sept. 30, '90).....	237 50
do do.....	J. K. Hogg.....	23	6	3 do 2 days (to Jan. 2, 1891).....	255 55
do do.....	D. Wentzel.....	23	6	2 do 29 days, from do.....	180 84
Barrington and Yarmouth.....	O. L. Davison.....	48	6	12 do.....	1,600 00
Barrington Passage and Cape Sable					
Island.....	T. W. Robertson.....	14	6	12 do.....	275 00
Barr Settlement and Shubenacadie.....	J. W. Dunsmore.....	32 r. t.	1	12 do.....	97 00
Barrio's Beach and Big Tracadie.....	A. F. Bowden.....	4	3	12 do.....	30 00
Barss' Corner and Chesley's Corner.....	A. Tretheway.....	17 r. t.	2	6 do (to Sept. 30, '90).....	35 00
do do.....	E. Woodworth.....	17 r. t.	2	6 do from do.....	37 24
Barss' Corner and Mahone Bay.....	L. DeLong.....	18	1	12 do.....	79 00
Barton and Railway Station.....	W. A. Gavel.....	3	12	12 do.....	115 00
Basin River Inhabitants and Lower					
River Inhabitants.....	J. A. McCarthy.....	3	2	9 do (to Dec. 31, '90).....	21 00
do do.....	P. McCarthy.....	3	2	3 do from do.....	9 00
Basin River Inhabitants and Mc-					
Namara's Island.....	E. McNamara.....	2	2	9 do (to Dec. 31, '90).....	33 75
do do.....	E. J. McNamara.....	2	2	3 do from do.....	11 00
Battery Hill and New Gairloch.....	R. McLeod.....	8	3	12 do.....	120 00
Battery Hill and Railway Station.....	F. H. Matheson.....	½	12	12 do.....	60 00

DETAIL of all payments for Mail Transportation in Nova Scotia Postal Division,  
&c.—Continued.

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Baxter's Harbour & Sheffield Mills..	W. E. Harris. . .	9½	1	12 months	59 16
Bay St. Lawrence and Ingonish. . .	D. McLeod. . .	40	2	12 do	430 00
Bay St. Lawrence and Meat Cove. .	H. McDonald. .	7	2	12 do	48 00
Bear Cove, Cheticamp & Meteghan. .	G. L. Comeau. .	4	2	12 do	40 00
Bear River, West Side, and Deep Brook, &c. . . . .	J. H. McClelland	5 & 6	10 & 2	6 do (to Sept. 30, '90).	115 00
do do do do do	W. Lent. . . . .	5 & 6	10 & 2	6 do from do	75 00
Bear River, West Side, and Digby..	R. M. McClelland	10	6	12 do	134 65
Beaulx and Black River. . . . .	C. Grant. . . .	2½	1	12 do	15 00
Beaver Bank and Middle Sackville. .	R. Emmerson. .	13 r. t.	6 & 3	12 do	275 00
Beaver Bank and North Beaver Bank	W. Lively. . . .	8	2	12 do	80 00
Beaver Bank and Railway Station. .	D. Hallisay. . .	12 yds	12	12 do	93 00
Beaver Cove and Rear Beaver Cove	A. Gillis. . . .	3	1	5 do (from Nov. 1, '90)	8 33
Beaver Harbour and Salmon River. .	J. Hartling. . .	4	2	12 do	40 00
Beaver River Corner & Cedar Lake. .	A. Porter. . . .	18 r. t.	1	12 do	40 00
Bedford Basin and English Corner. .	N. Melvin. . . .	9½	3	12 do	159 00
Bedford Basin and Railway Station. .	W. McKenzie. .	100 yds	42	12 do	130 00
Beechmont and North-West Arm. . .	M. McLeod. . .	4	2	12 do	25 00
Belmont and Debert Station. . . . .	C. McDormand. .	15 r. t.	2	12 do	104 00
Belmont and Railway Station. . . .	T. Lindsay. . .	½	12	12 do	120 00
Berwick and Buckley's. . . . .	S. C. Parker. . .	22½ r. t.	2	12 do	110 00
Berwick and Morristown. . . . .	S. H. Nichols. .	14 r. t.	1	12 do	40 00
Berwick and Railway Station. . . .	E. C. Foster. . .	½	6	12 do	50 00
Big Harbour Island & Malagawatch	M. McIntosh. . .	3	2	10 do (from June 1, '90)	20 83
Big Intervale Margaree and Margaree Forks	D. Campbell. . .	17	3	12 do	175 00
Big Island and Merigonishe. . . . .	D. Cameron. . .	16	2	12 do	85 00
Big Lorraine and Sydney. . . . .	R. Martin. . . .	31	3 & 2	12 do	310 36
Big Marsh and Maryvale. . . . .	D. J. McDonald. .	3	1	12 do	16 00
Big Pond and Glengarry Valley. . .	M. McNeil. . . .	4	1	12 do	20 00
Big Pond and Rear of Ben Eoin. . .	A. Gillis. . . .	6	1	12 do	25 00
Big Pond and Salem Road. . . . .	H. D. Munro. . .	12	2	12 do	68 00
Big Port le Bear and Sable River. .	G. Harding. . . .	12	1	12 do	90 00
Big Tracadie and Mattie. . . . .	E. Coty. . . . .	8	1	12 do	40 00
Big Tracadie and Railway Station. .	W. Gerrior. . .	100 yds	12	12 do	40 00
Birchtown and Clyde River. . . . .	F. G. Nicoll. . .	29	3	12 do	400 00
Bishopville and Hantsport. . . . .	R. E. Bishop. . .	6	2	12 do	80 00
Black Rock and Parrsboro. . . . .	M. Phinney. . .	6	1	12 do	42 00
Blanchard Road and New Glasgow. .	J. J. Webster. . .	14	2	12 do	158 00
Blanche and Cape Negro. . . . .	M. Slate. . . . .	4	3	3 do (to June 30, '90).	18 75
do do do do do	A. D. Perry. . .	4	3	9 do from do	51 00
Blandford and Hubbard's Cove. . .	W. A. Mitchell. .	17	3	12 do	270 00
Blandford and Tancook Island. . .	J. Pearl. . . . .	4	1	12 do	38 00
Blomidon and Canning. . . . .	P. Brown. . . .	7½	6	12 do	199 04
Blomidon and Lower Blomidon. . .	A. Kennedy. . .	2½	2	12 do	25 00
Bloomfield and Main Post Road. . .	H. R. Jones. . .	18	12	12 do	25 00
Blue Rock and Lunenburg. . . . .	J. E. Hunt. . . .	5	1	2 do (to May 31, '90)..	6 66
do do do do do	do do do do do	5	2	4 do (to Sept. 30, '90).	26 67
do do do do do	do do do do do	5	1	6 do from do	20 00
Boom and Lower Washabuck. . . . .	R. Palmer. . . .	50 r. t.	2	12 do	250 00
Boom and Whycomagh. . . . .	H. A. McDougall	15	1	12 do	51 00
Boulardarie and Little Bras d'Or. .	D. Broderick. . .	20	3 & 2	12 do	265 00
Boulardarie and Point Clear. . . .	J. Munro. . . .	7½	2	12 do	76 36
Boylston and Milford Haven Bridge	J. R. Atwater. .	¾	12	12 do	100 00
Boylston and Ragged Head. . . . .	J. Tory. . . . .	5	3	12 do	119 00
Brazil Lake and Railway Station. .	I. Crosby. . . .	¼	6	3 do (to June 30, '90)..	5 00
do do do do do	M. Iram. . . . .	¼	6	9 do from do	15 00
Brenton and South Ohio. . . . .	S. Pennell. . . .	4	1	12 do	20 00
Bridgetown and Dalhousie West. . .	L. A. Dickie. . .	28 r. t.	1	12 do	90 00
Bridgetown and Granville Ferry. .	J. E. Reid. . . .	14	3	12 do	194 00
Bridgetown and Lawrencetown. . .	W. E. Poole. . .	18 r. t.	1	12 do	75 00
Bridgetown and Middleton. . . . .	E. Poole. . . . .	17	2	12 do	147 00
Bridgetown and Parker's Cove. . .	I. F. Hall. . . .	27 r. t.	2 & 1	12 do	149 48
Bridgetown and Railway Station. .	F. Croskill. . .	¼	12	12 do	100 00

DETAIL of all payments for Mail Transportation in Nova Scotia Postal Division,  
&c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Bridgewater and Halifax .....	G. Blair .....	91	6	12 months .....	4,550 00
Bridgewater and Lawrencetown .....	C. W. Phinney..	56	2	3 do (to June 30, '90) ..	99 00
do do .....	A. P. Phinney..	56½	2	9 do from do .....	517 50
Bridgewater and Mill Village .....	R. McDonald ..	37	3	9 do (to Dec. 31, '90)..	352 50
do do .....	B. A. Mack .....	37	3	3 do from do .....	117 00
Bridgewater and New Canada .....	W. J. Cronin ..	26 r.t.	1	12 do .....	70 00
Bridgewater and Pleasant River .....	J. Whitman .....	10	3 & 1	12 do .....	239 00
Bridgewater and Shelburne .....	J. K. Hogg .....	89	6	12 do (less fine) .....	4,830 40
Brighton and Railway Station .....	E. Spittle .....	4	12	12 do .....	150 00
Briley's Brook and Railway Station .....	R. Chisholm .....	1	6	1 do (to April 30, '90)..	3 33
do do .....	A. McKinnon ..	2	6	11 do from do .....	36 67
Brookfield and Forest Glen .....	W. S. Hamilton.	13 r.t.	2	12 do .....	65 00
Brookfield and Pleasant River .....	J. Hardy .....	8	3	12 do .....	149 00
Brookfield and Railway Station .....	J. Graham .....	100 yds	18	12 do .....	150 00
Brookfield and Upper Stewiacke .....	J. J. Brenton ..	18	6	12 do .....	524 72
Brookland and Salt Springs .....	W. Grey .....	3	1	2 do (to May 31, '90)..	4 00
do do .....	do .....	3	2	10 do from do .....	25 00
Brooklyn and Yarmouth .....	J. D. Morrill ..	4	2	12 do .....	40 00
Brown's Brook and Halfway River Station .....	S. S. Brown .....	4	1	12 do .....	40 00
Brown's Mountain and Marshy Hope .....	A. McDonald ..	5½	1	12 do .....	25 00
Brule and Denmark Road .....	J. W. McLeod ..	3	3	12 do .....	50 00
Brule and Forbes .....	J. Forbes .....	2	1	12 do .....	30 00
Brookfield and Main Post Road .....	M. Winot .....	1	1	12 do .....	10 00
Buckley's and Kentville .....	E. H. Fuller .....	34½ r.t.	5	12 do .....	418 00
Burlington and Victoria Harbour .....	A. B. Hall .....	16 r.t.	1	12 do .....	39 48
Burntcoat and Noël .....	I. A. O'Brien ..	4½	3	12 do .....	52 00
Cain's Mountain and McKinnon's Harbour .....	D. McKenzie .....	3	1	12 do .....	20 00
Caledonia Corner and Malaga Gold Mines .....	J. H. McClelland	9	3	1 do (to April 30, '90)..	13 33
do do .....	do .....	9	6	11 do from do .....	229 17
Caledonia Corner and West Caledonia .....	J. McGinty .....	3	3	7 do (from Sept. 1, '90)	49 58
Caledonia Corner and Whiteburn Mines .....	M. Chivers .....	6½	3	12 do .....	75 00
Cambridge Station and Condon Settlement .....	J. Caldwell .....	10½ r.t.	1	12 do .....	45 00
Cambridge Station and Railway Station .....	A. Neily .....	50 yds	12	3 do (to June 30, '90) ..	6 50
do do .....	J. P. Neily .....	50 yds	12	9 do from do .....	30 00
Camden and Truro .....	E. Logan .....	9	2	12 do .....	80 00
Cameron Settlement and Pictou Road .....	D. M. Cameron ..	22 r.t.	2 & 1	12 do .....	89 00
Campbell's Mountain and Why-cocmagh .....	J. McAskill .....	7	1	12 do .....	35 00
Canaan and Kentville .....	J. B. DeWolf ..	6	6	12 do .....	173 00
Canaan and Tusket .....	A. Hurlburt .....	26 r.t.	1	12 do .....	70 00
Canada Creek and Waterville .....	E. Thomas .....	9½	2	3 do (to June 30, '90)..	16 75
do do .....	W. B. Thomas ..	9½	2	9 do from do .....	48 75
Canard and Lower Canard .....	E. H. Lockwood	2	12	12 do .....	125 00
Cannes and River Bourgeoise .....	C. Sampson .....	2½	3	12 do .....	54 60
Canning and Kentville .....	A. C. Reid .....	12	6	12 do .....	280 00
Canning and Medford .....	W. West .....	5	6 & 3	12 do .....	150 00
Canning and North Medford .....	B. Weaver .....	4	1	12 do .....	20 00
Canning and Port William Station .....	J. L. Bishop .....	7	6	12 do .....	247 00
Canning and Scott's Bay .....	W. H. Jess .....	16	3	12 do .....	176 00
Canoe Lake and Gaberouse .....	A. Munro .....	4	1	12 do .....	20 00
Canso and Guysboro' .....	G. W. Scott .....	31	6	12 do .....	1,090 00
Cape George and Georgeville .....	L. McIsaac .....	20 r.t.	1	12 do .....	40 00
Cape Le Ronde and Rocky Bay .....	C. Doyle .....	3	2	12 do .....	29 00
Cape Negro Island and Purgatory Point .....	A. D. Perry .....	3	2	12 do .....	55 00



DETAIL of all payments for Mail Transportation in Nova Scotia Postal Division,  
&c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts-
Cape North and Dingwall.....	J. McPherson....	4½	2	12 months.....	38 00
Cape Sable Island and Clark's Harbour.....	J. K. Hogg.....	20 r.t.	6	12 do.....	380 00
Carriboo Gold Mines and Upper Musquodoboit.....	A. Burnett.....	8	3	12 do.....	156 00
Carroll's Corner and Elmsdale.....	J. Carroll.....	19½ r.t.	2	12 do.....	64 00
Catalone and Catalone Gut.....	A. McDougall....	3½	1	7 do (to Oct. 31, '90).....	14 00
do do.....	do.....	4½	1	5 do from do.....	12 85
Catalone and Little Lorraine.....	H. McIntyre.....	8 & 4	3 & 1	12 do.....	149 00
Catalone and New Boston.....	J. McDonald.....	4	2	12 do.....	29 00
Centredale and Hopewell.....	J. H. Grant.....	8	2	6 do (from Oct. 1, '90).....	30 50
Centreville and Hall's Harbour.....	S. E. Roscoe.....	18 r.t.	1	12 do.....	94 00
Chance Harbour and Pictou Landing.....	S. Fraser.....	4	1	12 do.....	26 00
Chapman Settlement and Head of Anherst.....	L. Greeno.....	6	1	12 do.....	30 00
Charles Cove and Larry's River.....	E. Pelrine.....	4	2	6 do (from Oct. 1, '90).....	26 00
Chebogue Point and Yarmouth.....	W. Cain.....	12 r.t.	3	12 do.....	111 75
Chelsea and Pleasant River.....	H. Dexter.....	9	1	12 do.....	55 00
Chester and Kentville.....	J. L. Bishop.....	46	2	12 do.....	650 00
Chester and Windsor.....	J. E. Millett.....	35	2	12 do.....	369 00
Cheverie and Kennetcook.....	M. Sandford.....	8	1	12 do.....	38 00
Cheverie and Newport.....	R. M. Wilcox.....	17	6	12 do.....	515 00
Cheverie and Walton.....	R. Pratt.....	12	3	12 do.....	175 00
Chignecto and Maccan.....	M. B. Harrison....	3½	3	12 do.....	140 00
Chimney Corner and Dunvegan.....	L. M. McPherson....	7	1	12 do.....	28 00
Chipman's Brook and Lakeville.....	C. N. Porter.....	18 r.t.	2	12 do.....	80 00
Christmas Island and East Bay.....	J. McAdam.....	31	3	12 do.....	400 84
Churchville and Mountville.....	J. Urquhart.....	3	1	12 do.....	20 00
Churchville and New Glasgow.....	W. West.....	6	3	12 do.....	75 00
Claremont and River Philip.....	M. Chapman.....	3	2	12 do.....	29 00
Clark's Harbour and The Hawk.....	R. W. Stephens.....	3½	6	12 do.....	58 00
Clark's Road and Louisburg.....	A. McLean.....	4½	1	12 do.....	39 00
Clementsport and Clementsvalle.....	G. G. Hicks.....	4	3	12 do.....	58 00
Cloverdale and Middle Stewiacke.....	W. W. Winton.....	7	2	12 do.....	60 00
Clyde River and Upper Clyde River.....	J. K. Hogg.....	25	1	12 do.....	98 00
Cogmagun River and Kennetcook.....	J. Reynolds.....	5	1	12 do.....	16 00
Coldbrook Station and Railway Station.....	H. Porter.....	60 yds	12	12 do.....	28 00
Coldstream and Gay's River.....	C. Gay.....	5	1	12 do.....	30 00
Cole Harbour and Port Felix.....	G. D. Jamieson....	4	3	6 do (from Oct. 1, '90).....	30 00
College Grant and Collegeville.....	T. J. Sears.....	3	2	8 do (from Aug. 1, '90).....	33 33
Collegeville and Lochaber.....	do.....	1½	3	12 do.....	50 00
Comeauville and Railway Station.....	A. P. Thériau.....	2	12	12 do.....	140 00
Concession and Railway Station.....	J. L. Boudreau.....	2	3	12 do.....	38 00
Conquerall Bank and Conquerall Mills.....	A. Snyder.....	5	1	12 do.....	40 00
Corberrie and Weymouth Bridge.....	W. Weaver.....	14	2	12 do.....	190 00
Cow Bay and Mira Gut.....	J. Martel.....	25 r.t.	1	12 do.....	75 00
Cow Bay and Sydney.....	J. O'Callaghan.....	26½	6	12 do.....	575 00
Coxheath and Sydney.....	R. Martin.....	3	2	12 do.....	25 00
Cranton Section and Middle Section North-East Branch Margaree.....	J. F. Phillips.....	3	3	12 do.....	25 00
Creigneish Rear and Port Hastings.....	C. McNeil.....	10	1	12 do.....	40 00
Cross Roads Country Harbour and Goshen.....	J. G. Sinclair.....	10	1	12 do.....	35 48
Cross Roads Ohio and Ireland.....	P. W. Murphy.....	5	1	12 do.....	26 00
Cross Roads Ohio and James' River Station.....	H. A. McDougall....	10	6	12 do.....	296 00
Crousetown and Petite Rivière Bridge.....	S. Hilton.....	3	1	12 do.....	20 00
Culloden and Digby.....	C. E. Turnbull.....	17 r.t.	1	12 do.....	47 00
Cummings Mountain and Sunnybrae.....	D. McIntosh.....	3	1	12 do.....	20 00

DETAIL of all payments for Mail Transportation in Nova Scotia Postal Division,  
&c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Dalhousie Settlement and Durham.	H. McKay.	11	2	12 months	81 50
Dartmouth and Halifax.	J. E. Leadley.	14	19	12 do	120 00
Dartmouth and Montague Gold Mines.	F. W. Cooper.	7	3	12 do	120 00
Dartmouth and South-East Passage.	J. A. Shiers.	6	1	12 do	52 00
Dartmouth and West Chezzetcook.	W. H. Isnor.	48 r.t.	1	12 do	150 00
Dean and Shubenacadie.	T. Cox.	36	6	12 do	1,100 00
Debert Station and Folly Mountain.	R. English.	17 3/4 r.t.	3	12 do	285 36
Debert Station and Masstown.	E. G. Fraser.	4	3	12 do	62 00
Delap's Cove and Granville Ferry.	W. W. Hardy.	12	1	12 do	60 00
Dennistown and Judique.	A. Gillis.	7 1/2	1	12 do	30 00
Descouse and Lennox Ferry.	N. McDonald.	3	6	12 do	194 00
Descouse and Rocky Bay.	do	3	2	12 do	30 00
Devon and Goffs.	T. Cox.	5 1/2	1	12 do	30 00
Digby and Railway Station.	G. P. Burton.	20 yds	12	12 do	100 00
Digby and Thornville.	H. Sederquist.	8	2	9 do (to Dec. 31, '90).	75 00
do do	J. W. Mussels.	8	2	3 do from do	12 25
Digby and Westport.	G. & E. Stailing.	43	6	12 do	1,199 00
Digby Wharf and Railway Station.	G. P. Burton.	200 yds	6	3 do (to June 30, '90).	12 50
do do	do	4	12	9 do from do	93 75
Doherty Creek and Street's Ridge.	W. K. Peers.	10	3	12 do	108 00
Dover East and Peggy's Cove.	W. Baker.	4	2	12 do	60 00
Dufferin Mines and Salmon River.	A. Gallagher.	3 1/2	3	12 do	60 00
Dunmaglass and McArra's Brook.	A. McGillivray.	3	3	12 do	50 00
East Bay and McAdam's Lake.	J. McDonald.	6 1/2	2	12 do	59 00
East Bay and Sydney.	J. McKinnon.	14	5	Season 1890.	201 60
East Bay and Sydney Mines.	J. W. Peppitt.	19	6	12 months.	696 00
East Chezzetcook and Head of Chezzetcook.	J. Smith.	3	1	12 do	25 00
Eastern Harbour and Little River, Cheticamp.	L. LeBlanc.	2 1/2	2	12 do	25 00
Eastern Harbour and Pleasant Bay.	J. G. McIntosh.	24 1/2	1	3 do (to June 30, '90, and arrears).	27 75
do do	E. Poirier.	24 1/2	1	9 do from do	104 25
Eastern Harbour and Port Hastings.	H. A. Archibald.	101	6	12 do	7,100 00
East Jeddore and Jeddore Oyster Ponds.	D. Mitchell.	3 1/2	2	12 do	65 00
East Mapleton and East Southampton.	E. Brown.	6	2	12 do	100 00
East Margaree and Main Post Road.	D. McInnis.	2	6	12 do	65 00
East Mines Station and Folly Village.	D. L. Urquhart.	4 1/2	12	12 do	225 00
East Mines Station and Ry. Station.	C. Morrison.	20 yds	6	12 do	50 00
East Mountain and Valley Station.	G. E. Johnson.	2	2	12 do	40 00
East River, St. Marys and Green's Brook.	M. Green.	5 1/2	1	12 do	20 00
East Side Pubinco Harbour and Forbes Point.	J. McComisky.	10 1/2	3	12 do	183 00
East Side Ragged Island and Wall's Corner.	W. P. Hupman.	3	2	12 do	40 00
East Southampton and Ry. Station.	W. F. Lewis.	1 1/2	12	12 do	45 00
East Southampton and South Brook.	A. H. Brown.	5	2	3 do (to Jan. 31, '91).	9 00
do do	W. F. Lewis.	5	2	2 do from do	6 00
Eastville and Upper Stewiacke.	S. Ellis.	10	6	12 do	400 00
Economy Point and Main Post Road.	J. F. Vance.	1	6	12 do	80 00
Eel Cove and Main Post Road.	M. McLeod.	1 1/2	2	12 do	10 00
Eel Creek and Linden.	K. Hunter.	9 r.t.	3	12 do	77 12
Ellershouse and Newport.	W. Woodroffe.	6	2	12 do	60 00
Ellershouse and Railway Station.	J. McDonald.	50 yds	24	12 do	50 00
Elmsdale and Nine Mile River.	J. Urquhart.	8	1	12 do	44 80
Elmsdale and Railway Station.	E. Thompson.	80 yds	12	12 do	50 00
Emerald and Main Post Road.	T. Tompkins.	3 1/2	1	12 do	20 00
Endfield and Oldham.	G. H. Dowell.	3	6	12 do	100 00
Endfield and Railway Station.	H. F. Donaldson.	20 yds	12	12 do	50 00

DETAIL of all payments for Mail Transportation in Nova Scotia Postal Division, &c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Endfield and Renfrew .....	J. McKenzie .....	7	1	12 months .....	48 00
Englishtown and Ingonishe .....	M. Morrison .....	34	2	12 do .....	680 00
Erinville and Roman Valley .....	P. A. Farrell .....	7	1	12 do .....	20 80
Eureka and Railway Station .....	H. Grant .....	$\frac{1}{2}$	12	12 do .....	50 00
Fairview Station and Rockingham Railway Station .....	E. McDonald .....	1	3	12 do .....	65 00
Falkland and Herring Cove .....	T. Hayes .....	3	2	12 do .....	45 00
Falkland Ridge and Springfield .....	D. D. Starratt .....	5	1	12 do .....	29 48
Falmouth Station and Ry. Station .....	W. Armstrong .....	12 yds	12	12 do .....	47 00
Falmouth Station and Upper Falmouth .....	L. Åker .....	10 r.t.	3	12 do .....	116 00
Farmington and West Branch River Philip .....	M. Chapman .....	12 $\frac{1}{2}$ r.t.	3	12 do .....	150 00
Fauxburg and Lunenburg .....	E. Steverman .....	6 $\frac{1}{2}$	1	12 do .....	65 00
Fifteen Mile Stream and Trafalgar .....	J. Nelson .....	16	1	12 do .....	143 00
Fletcher's Station and Wellington Station .....	E. Largie .....	$\frac{3}{4}$	6	12 do .....	75 00
Folly Lake and Railway Station .....	N. McPherson .....	100 yds	12	12 do .....	40 00
Fort Lawrence and Railway Station .....	C. E. Baker .....	$\frac{1}{4}$	12	12 do .....	100 00
Fort Lawrence and Upper Fort Lawrence .....	M. Chapman .....	2 $\frac{3}{4}$	3	12 do .....	60 00
Fosters and Newburn .....	J. E. Jodrey .....	5	1	12 do .....	24 00
Fouchie and Gaberouse .....	W. McDonald .....	12	3	12 do .....	175 00
Fouchie and Grand River .....	J. Morrison .....	30	3	12 do .....	299 00
Four Mile Brook and West River .....	J. McKay .....	5 $\frac{1}{2}$	2	12 do .....	24 00
Fox Harbour and Pugwash .....	S. P. Borden .....	11 $\frac{1}{2}$	3	12 do .....	150 00
Framboise and West Framboise .....	A. McQueen .....	5	1	12 do .....	30 00
Fraser's Grant and Heatherton .....	A. McDougall .....	5	1	12 do .....	46 00
French River and McGrath's Mountain .....	D. Cameron .....	6	1	12 do .....	28 00
Frenchvale and North-West Arm .....	B. Gouthro .....	7	1	12 do .....	27 00
Gaberouse and Gaberouse Barachois .....	T. Bagnell .....	1 $\frac{1}{2}$	2	12 do .....	12 00
Gaberouse and Gull Cove .....	A. Hardy .....	4	1	12 do .....	20 00
Gaberouse and Sydney .....	R. Martin .....	28	3	12 do .....	370 36
Gaspereaux and Gaspereaux (circu- lar route) .....	R. Westcott .....	19 r.t.	1	12 do .....	63 00
Gaspereaux and Newtonville .....	do .....	4	1	12 do .....	20 00
Gaspereaux and Wolfville .....	E. A. Davison .....	2 $\frac{1}{2}$	6	12 do .....	94 48
George's River and Little Bras d'Or .....	L. Day .....	5	1	12 do .....	32 00
Georgeville and Glebe Road .....	M. McDougall .....	15 r.t.	1	12 do .....	55 00
Gilbert Cove and Railway Station .....	L. N. Thibreau .....	3 $\frac{1}{2}$	12	12 do .....	144 00
Gillander's Mountain and Middle River .....	C. McLennan .....	4	1	12 do .....	20 00
Glen Bard and Railway Station .....	J. McLean .....	1 $\frac{1}{2}$	2	12 do .....	30 00
Glendale and Mabou .....	A. Boyd .....	24	2	12 do .....	398 00
Glendale and River Inhabitants Bridge .....	do .....	14	3	12 do .....	230 00
Glendyer and Mabou .....	W. McDonald .....	3	3	12 do .....	40 00
Glencol and Waternish .....	R. McKenzie .....	4	1	12 do .....	20 00
Glengarry and Port Hood .....	S. Campbell .....	8	1	12 do .....	48 72
Glengarry Station and Pleasant Valley .....	A. McKay .....	27 r.t.	3	9 do (to Dec. 31, '90) ..	176 58
do do .....	R. Fraser .....	28 $\frac{1}{2}$ r.t.	3	3 do from do ..	51 45
Glengarry Station and Ry. Station .....	D. Graham .....	100 yds	12	12 do .....	50 00
Glen Margaret and Head of St. Margaret's Bay .....	G. Dauphine .....	12	6	12 do .....	340 00
Glen Margaret and Peggy's Cove .....	J. Miller .....	9	6	12 do .....	208 00
Glenshee and Merigomishe .....	D. Campbell .....	9	2	12 do .....	75 00
Goffs and Waverley .....	J. E. McDonald .....	11	1	6 do (to Sept. 30, '90) ..	24 50
do do .....	M. D. Goff .....	11	1	6 do from do ..	26 00
Goldenville and Sherbrooke .....	M. McGrath .....	2 $\frac{1}{2}$	6	12 do .....	135 00
Gore and Maitland .....	M. Tucker .....	20	3	12 do .....	375 00



DETAIL of all payments for Mail Transportation in Nova Scotia Postal Division,  
&c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Gore and Mount Uniacke.....	J. Trider.....	27	3	12 months (less fine).....	340 00
Gore and Newport.....	J. W. Hennessy.	41 r.t.	3	12 do .....	320 00
Gore and Shubenacadie ( <i>viâ</i> Blois Road).....	A. Densmore....	40 r.t.	1	12 do .....	119 00
Gore and Shubenacadie ( <i>viâ</i> North Salem).....	do .....	42 r.t.	1	12 do .....	127 00
Goshen and North End of Lochaber	A. Manson.....	7	2	12 do .....	80 00
Goshen and St. Andrews.....	D. B. Sinclair....	17½	3	12 do .....	156 00
Grand Anse and Grandique Ferry...	N. McDonald....	3	6	12 do .....	94 00
Grandique Ferry and Lennox Ferry	G. M. Shaw.....	¾	6	12 do .....	600 00
Grandique Ferry and West Arichat	A. McDonald....	10	6	12 do .....	490 00
Grand Lake Station and Railway Station.....	G. Nichols.....	100yds	12	12 do .....	20 00
Grand Narrows and Grand Narrows Rear.....	M. A. J. McDon- ald .....	5	1	12 do .....	40 00
Grand Pré and Long Island.....	A. Fullerton....	2½	3	12 do .....	80 00
Grand Pré and Railway Station....	A. Borden.....	¾	12	12 do .....	100 00
Grand Pré and Wallbrook.....	A. Mitchell.....	2	1	12 do .....	20 00
Grand River and St. Peters.....	A. Morrison....	17	6	9 do (to Dec. 31, '90) ..	450 00
do do .....	do .....	17	6	3 do from do .....	99 75
Granton and Westville.....	J. Robertson....	7	2	12 do .....	99 00
Granville Ferry and Victoria Beach	W. A. Piggott..	17	6	12 do .....	367 08
Great Village and Londonderry Station .....	A. S. Kent.....	4	12	12 do .....	300 00
Great Village and Lower Five Islands .....	J. W. Davison..	29½	6	12 do .....	620 00
Green Cove and Ingonish.....	M. Timmins....	6	2	12 do .....	48 00
Greenfield and Middlefield.....	J. E. Tibert....	5	2	12 do .....	48 00
Greenfield and Valley Station.....	R. McKenzie....	5½	2	12 do .....	52 48
Green Harbour and Main Post Road	A. E. Enslow, jun	2	3	12 do .....	50 00
Green Hill and Westville.....	R. McCaul.....	6	3	12 do .....	112 00
Green's Creek and Lower Stewiacke	A. Bigelow....	30 r.t.	1	12 do .....	80 00
Greenville and Westchester.....	S. A. Purdy....	16 r.t.	2	12 do .....	110 00
Greenville Station and Head of Wallace Bay (North side).....	J. Dotten.....	17	3	12 do .....	188 00
Greenville Station and North Greenville.....	G. Rushton....	5	1	12 do .....	50 00
Greenville Station and Ry. Station.	J. S. Forshner..	50 yds	12	12 do .....	60 00
Greenville Station and Wallace ..	B. Betts.....	17	6	12 do .....	280 00
Grindstone Island, House Harbour and Etang du Nord.....	J. Patton.....	4 & 2	1	12 do .....	48 00
Grosses Coques and Railway Station	A. C. Melancon..	4	12	12 do .....	240 00
Grosvenor and Railway Station ..	M. O'Neill.....	5	3	12 do .....	100 00
Guysboro' and Heatherton.....	D. D. Harrington	26	6	12 do .....	1,378 00
Guysboro' and Salmon River Lake Settlement .....	T. O'Connor....	13	3	12 do .....	185 00
Guysboro', Tor Bay and New Harbour .....	J. Tory.....	27	2	12 do .....	285 00
Hainsville and North Range Corner	W. H. Hains....	2	2	12 do .....	31 00
Half Island Cove and Main Post Road .....	W. S. Horton....	1½	6	12 do .....	60 00
Half Island Cove and Port Felix...	W. Digdon.....	29 r.t.	3	12 do .....	165 00
Halfway River Station and Harrison Settlement .....	J. Harrison.....	7	2	12 do .....	94 00
Halfway River Station and Railway Station .....	J. Davison.....	¾	12	12 do .....	60 00
Halifax and Lower Prospect.....	G. H. Slaughen- white .....	22½	1	12 do .....	84 00
Halifax and Prospect.....	J. Walsh.....	21	2	12 do .....	125 00
Halifax and Railway Station.....	E. Fishwick....	1½	as req.	12 do .....	1,000 00
Halifax and Sambro.....	P. Scallion.....	21½	2	3 do (to June 30, '90) ..	41 25
do do .....	J. Smith, jun... 21½	2	9	do from do .....	82 50

DETAIL of all payments for Mail Transportation in Nova Scotia Postal Division, &c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Halifax and West River Sheet Harbour.	H. W. Quinn...	80	3	12 months	1,387 60
Halifax Post Office and Wharf.	S. Cunard & Co.			Season 1890-91.	435 00
do do	W. J. Conlon			do	54 00
do do	Sundry persons			Special trips	3 50
Hansford and Streets Ridge.	A. D. Lockhart.	14 r.t.	6	6 months (to Sept. 30, '90)	100 00
do do	A. Crowley	14 r.t.	6	do from do	95 00
Hansford and West Hansford.	W. Sutherland.	1½	2	12 do	25 00
Hantsport and Lochartville.	B. Nason.	3	3	12 do	74 00
Hantsport and Railway Station.	S. H. Michner	1½	24	12 do	68 00
Harbourville and Railway Station (Berwick).	G. Collins.	11½	2	12 do	100 00
Harbour au Bouche and Ry. Station	V. Levangie.	2	12	12 do	78 00
Harmony Mills and Westfield.	R. Johnson.	4	1	12 do	25 00
Hazel Hill and Little Dover.	P. Sampson.	4	1	12 do	20 00
Head of Indian Harbour Lake and Sherbrooke.	M. McGrath	41 r.t.	3	12 do	224 64
Head of Jeddore and West Jeddore.	J. A. Blakeney.	6	2	6 do (to Sept. 30, '90)	37 50
do do	do	6	3	6 do from do	56 24
Head of River Hébert and River Hébert	B. Baird.	5	3	12 do	120 00
Head of South River Lake and Salmon River Lake Settlement.	R. Flynn.	15	1	12 do	44 00
Head of Tatamagouche Bay and Tatamagouche	W. Dobson.	5	3	12 do	130 00
Heatherton and Railway Station.	C. Landry.	½	12	12 do	80 00
Heatherton and Summerside.	D. Boudroit.	3	1	12 do	27 72
Hebron and Railway Station.	G. F. Moses.	¼	12	12 do	34 00
Hectanooga and Railway Station.	D. D. McQuarrie	50 yds	12	3 do (to June 30, '90).	10 00
do do	E. E. Archibald.	50 yds	12	9 do from do	30 00
Hedgeville and Main Post Road.	H. Holmes.	1	2	9 do (to Dec. 31, '90)	15 75
do do	N. B. Ross.	1	2	3 do from do	7 50
Heinford and Pleasant River.	J. Venot.	7	1	3 do (to June 30, '90)	7 50
do do	H. Dexter.	7	1	9 do from do	24 00
Holland Harbour and Port Hillford	G. Flick.	3	3	3 do (to June 30, '90)	10 00
Horville and South Head of Cow Bay	H. Spencer.	9	1	12 do	57 84
Hopewell and Melrose.	J. McDaniel.	32½	6	10 do (to Jan. 31, '91).	640 76
do do	H. E. Stewart.	32½	6	2 do from do	128 15
Hopewell and Railway Station.	E. McLean.	1	12	12 do	49 00
Hopewell and Trafalgar.	J. H. Grant	16 & 2	2 & 1	12 do	170 00
Horton Landing and Ry. Station	F. G. Curry	¼	12	12 do	90 00
Indian Point and Mahone Bay.	J. Ernst	5	1	12 do	30 00
Iron Ore and Sunnybrae.	J. McDonald.	4	1	12 do	25 00
Isaac's Harbour and Isaac's Harbour, East Side.	S. McMillan.	4	3	12 do	62 87
Isaac's Harbour and Melrose.	M. H. Grant.	28	3	6 do (to Sept. 30, '90).	114 00
do do	H. Stewart.	28	3	6 days (to Oct. 6, '90)	10 00
do do	J. D. Cameron	28	3	5 mos. 25 dys. from do	116 72
Isaacs Harbour, East Side, and New Harbour	A. McDonald.	12	1	12 do	74 88
Jackson's and West Branch River Philip.	M. Chapman	6½	3	12 do	180 00
James River and James River Station	J. Chisholm.	3	2	12 do	50 00
James River Station and Ry. Station	J. McDonald.	100 yds	12	12 do	60 00
Jauvin's Harbour and West Arichat	P. Dorey.	7	2	12 do	85 00
Johnson's Crossing and Ry. Station	G. Riese.	¼	12	12 do	50 00
Jordan Bay and Shelburne.	W. G. Swinesburg.	22 r. t.	6 & 3	12 do	195 00
Judique and Upper South-West Mabou	D. McDonell	11	1	12 do	50 00

DETAIL of all payments for Mail Transportation in Nova Scotia Postal Division, &c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					8 cts.
Kempt and New Grafton . . . . .	L. Kathrens . . . . .	3½	1	12 months . . . . .	28 00
Kempt Head and Upper Kempt Head . . . . .	M. McKenzie . . . . .	3	2	12 do . . . . .	42 00
Kennetcook Corner and Noel . . . . .	I. A. O'Brien . . . . .	20 r.t.	2	12 do . . . . .	72 00
Kennington Cove and Louisburg . . . . .	J. McLean . . . . .	6	1	12 do . . . . .	40 00
Kentville and Railway Station . . . . .	J. E. Eaton . . . . .	200 yds	24	12 do . . . . .	150 00
Kerrowgare and Low Moor . . . . .	J. McDonald . . . . .	4	1	12 do . . . . .	20 00
Kerrowgare and Sunnybrae . . . . .	D. K. McDonald . . . . .	4	2	12 do . . . . .	46 00
Kewstoke and Whycocomagh . . . . .	A. McQuien . . . . .	7½	1	12 do . . . . .	35 00
Kingsbury and Lunenburg . . . . .	J. E. Hunt . . . . .	31 r.t.	2 & 1	12 do . . . . .	322 60
Kingston Station and Malvern Square . . . . .	W. Gates . . . . .	2½	6	3 do (to June 30, '90).	24 50
do do . . . . .	T. H. Walker . . . . .	2½	6	9 do from do . . . . .	67 50
Kingston Station and Ry. Station . . . . .	A. C. Vanbuskirk . . . . .	100 yds	12	12 do . . . . .	36 00
Kingston Station and Rhodes . . . . .	T. Walker and J. Randall . . . . .	14 r.t.	2	6 do (to Sept. 30, '90).	20 00
do do . . . . .	T. Walker . . . . .	15 r.t.	2	6 do from do . . . . .	39 00
Kingston Station and Tremont . . . . .	A. C. Vanbuskirk . . . . .	16 r.t.	2	12 do . . . . .	125 00
Kolbeck and Oxford . . . . .	T. R. Smith . . . . .	16 r.t.	1	12 do . . . . .	52 00
L'Anse à la Cabane and Magdalen Islands . . . . .	W. Cormier . . . . .	8½	1	6 do (to Sept. 30, '90).	80 00
La Have Island and West Dublin . . . . .	J. Remby . . . . .	5	1	12 do . . . . .	85 00
Lake Ainslie, South Side, and Lewis Mountain . . . . .	N. Martin . . . . .	4	1	12 do . . . . .	16 00
Lake Ainslie, South Side, and Strathlorne . . . . .	D. E. McLean . . . . .	17	2	12 do . . . . .	142 00
Lake Annis and Railway Station . . . . .	A. Whitman . . . . .	40 yds	6	12 do . . . . .	20 00
Lakelands and Railway Station . . . . .	J. E. Brown . . . . .	½	6	12 do . . . . .	60 00
Lake Ramsay and New Ross . . . . .	G. Ross . . . . .	5	2	12 do . . . . .	40 00
Lakevale and West Lakevale . . . . .	A. J. McGillivray . . . . .	3	4	9 do (to Dec. 31, '90).	36 00
do do . . . . .	J. Wallace . . . . .	3	4	3 do from do . . . . .	17 00
Lapland and Newcombe . . . . .	S. Demon . . . . .	18 r.t.	1	12 do . . . . .	51 00
Larry's River and Port Felix . . . . .	C. DeYoung . . . . .	11	2	6 do (to Sept. 30, '90).	50 00
Lawrencetown and Mineville . . . . .	J. Conrad . . . . .	5	1	12 do . . . . .	24 00
Lawrencetown and Mount Hanley, &c. . . . .	J. Balcom . . . . .	38 r.t.	1	3 do (to June 30, '90).	27 50
do do . . . . .	A. P. Phinney . . . . .	38 r.t.	1	6 do (to Dec. 31, '90).	49 50
Lawrencetown and Outram . . . . .	do . . . . .	11½	2	3 do from do . . . . .	24 75
Lawrencetown and Railway Station . . . . .	H. T. James . . . . .	¼	12	12 do . . . . .	74 00
Lawrencetown and Torbrooke . . . . .	J. Balcom . . . . .	23 r.t.	2	12 do . . . . .	100 00
Lawrencetown and West Inglisville . . . . .	G. C. Banks . . . . .	8	1	12 do . . . . .	30 00
Lawrencetown and West Lawrence-town . . . . .	M. Hiltz . . . . .	44	1	3 do (to June 30, '90).	5 00
do do . . . . .	S. J. Hiltz . . . . .	4	1	9 do from do . . . . .	15 00
Leamington and Spring Hill Mines . . . . .	G. Nelson . . . . .	4	1	12 do . . . . .	26 24
Leitche's Creek and Upper Leitche's Creek . . . . .	M. Beaton . . . . .	5	1	12 do . . . . .	25 00
Lewis Bay and Marion Bridge . . . . .	D. J. McKeagan . . . . .	31½	3	12 do . . . . .	231 00
Lingan and Sydney . . . . .	D. McDonald . . . . .	35 r.t.	6	12 do . . . . .	450 00
Linwood and Railway Station . . . . .	T. W. Kinney . . . . .	2	12	12 do . . . . .	100 00
Little Bass River and Pleasant Hills . . . . .	R. R. Elliott . . . . .	5	2	6 do (to Sept. 30, '90).	22 50
do do . . . . .	D. McLaughlin . . . . .	5	2	6 do from do . . . . .	21 50
Little Bras d'Or and Long Island Main . . . . .	N. O'Handley . . . . .	6	1	12 do . . . . .	50 00
Little Bras d'Or and Point Aconi . . . . .	D. J. Walker . . . . .	7	1	12 do . . . . .	50 00
Little Bras d'Or and Sydney . . . . .	J. McKinnon . . . . .	18	1	Season, 1890 . . . . .	66 00
Little Harbour and New Glasgow . . . . .	M. McKenzie . . . . .	6	3	12 months . . . . .	74 00
Little Harbour and Reidway . . . . .	J. R. Reid . . . . .	4	1	9 do (to Dec. 31, '90).	15 00
do do . . . . .	S. J. Reid . . . . .	4	1	3 do from do . . . . .	5 00
Little Judique and Rear Little Judique . . . . .	D. McMillan . . . . .	4	1	12 do . . . . .	20 00
Little River and Oxford . . . . .	H. S. Smith . . . . .	4	2	12 do . . . . .	47 00
Liverpool and Milton . . . . .	A. L. West . . . . .	3	12	12 do . . . . .	180 00



DETAIL of all payments for Mail Transportation in Nova Scotia Postal Division,  
&c.—*Continued.*

Name and Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Liverpool and Port Medway. ....	A. L. West. ....	13	3	12 months .....	360 00
Liverpool and Western Head. ....	A. A. Shand. ....	7	3	12 do .....	195 00
Loch Broom and Railway Station. ....	R. McLeod. ....	100yds	2	12 do .....	20 00
Loch Lomond and Red Islands. ....	M. McKenzie. ....	15	2	12 do .....	98 80
Loch Lomond and Stirling. ....	J. Patterson. ....	7	1	12 do .....	29 00
Loganville and West Branch River John. ....	S. Williamson. ....	2	6	12 do .....	60 00
Louisburg and South Louisburg. ....	M. McCrury. ....	2½	3	12 do .....	50 00
Lourdes and Railway Station. ....	A. McDonald. ....	3	12	12 do .....	50 00
Lovat and West River. ....	J. W. Fraser. ....	5	3	12 do .....	109 00
Lower Cove and River Hebert, West Side. ....	L. McDonald. ....	7	6	12 do .....	469 00
Lower Five Islands and Lynn. ....	G. H. Lewis. ....	6	2	12 do .....	40 00
Lower Five Islands and Parrsboro. ....	J. W. Broderick. ....	13	6	12 do .....	340 00
Lower L'Ardoise and Point Michaud. ....	T. McGrath. ....	4	1	12 do .....	19 00
Lower Meagher's Grant and Meagher's Grant. ....	W. McCurdy. ....	2½	3	12 do .....	50 00
Lower Meagher's Grant and Musquodoboit Harbour. ....	G. Rowlings. ....	14	1	12 do .....	70 00
Lower Onslow and Truro. ....	A. Doggett. ....	22 r.t.	3	12 do .....	220 00
Lower River Hebert and Maccan. ....	C. Carter. ....	9½	3	12 do .....	141 08
Lower River Inhabitants and Port Hawkesbury. ....	J. McLean. ....	13	3	12 do .....	150 00
Lower Ship Harbour East and Main Post Road. ....	T. Keating. ....	2	3	7 do (from Sept. 1, '90)	17 50
Lower South River Station and St. Andrews. ....	D. D. McDonald. ....	5	6	12 do .....	195 00
Lower Stewiacke and Ry. Station. ....	W. I. Boomer. ....	½	12	12 do .....	80 00
Lower Stewiacke and Ramsay. ....	W. Ramsay. ....	5	1	12 do .....	25 00
Lower Stewiacke and Wittenburg. ....	E. H. McGregor. ....	23 r.t.	2	12 do .....	117 00
Lower Wentworth and Wentworth Station. ....	B. Stevens. ....	8	3	12 do .....	69 00
Lower West Jeddore and West Jeddore. ....	L. Blakeney. ....	3	1	12 do .....	20 00
Lower West Pubnico and Pubnico Harbour. ....	N. A. D'Entremont. ....	7	3	12 do .....	170 00
Lunenburg and Second Peninsula. ....	E. Mason. ....	5	1	12 do .....	40 00
McCallum Settlement and Upper North River. ....	A. McCallum. ....	3	3	12 do .....	40 00
McCarthy's and Spry Bay. ....	P. Flaherty. ....	2½	3	12 do .....	45 00
McPherson's and Pinedale. ....	J. McDonald. ....	5	2	12 do .....	40 00
Mabou and Mabou Harbour Mouth. ....	D. McDonald. ....	5	2	12 do .....	28 00
Mabou and Sight Point. ....	A. McQuarrie. ....	16	1	12 do .....	51 30
Maccan and Railway Station. ....	R. D. Roach. ....	100yds	24	12 do .....	100 00
Mahone Bay and Northfield. ....	A. C. Zwicker. ....	16	1	12 do .....	98 00
Main-à-Dieu and Scatarie Island. ....	N. McCuish. ....	9	1	12 do .....	150 00
Maitland and Noel. ....	J. Woodworth. ....	12	6	12 do .....	274 00
Maitland and Shubenacadie. ....	A. S. Smith. ....	20	6	12 do .....	800 00
Malagash Point and Wallace. ....	A. McInnis. ....	30 r.t.	3	6 do (to Sept. 30, '90, less fine) .....	41 00
do do. ....	B. S. Seaman. ....	31 r.t.	3	1 do (to Oct. 31, '90) .....	30 00
do do. ....	J. A. Harvey. ....	31 r.t.	3	5 do from do .....	82 88
Malagawatch and River Dennis. ....	K. McKenzie. ....	8 & 5	3 & 2	12 do .....	91 16
Malagawatch and West Bay. ....	M. McLeod. ....	16	3	12 do .....	205 48
Malignant Cove and Merigomishe. ....	M. McNeil. ....	22	6	12 do .....	1,000 00
Manganese Mines and Valley Station. ....	J. Irving. ....	6½	2	12 do .....	50 00
Margaree Forks and Upper Settlement Middle River. ....	N. McDaniel. ....	18	2	12 do .....	130 00
Margaretville and Middleton. ....	R. Woodbury. ....	22 r.t.	3	12 do .....	149 00
Margaretville and Morden. ....	J. Redgate. ....	14	1	12 do .....	59 00
Marion Bridge and Trout Brook. ....	D. Lamond. ....	5	1	12 do .....	33 32
Marshalltown and Railway Station. ....	W. Marshall. ....	1½	12	12 do .....	97 00

DETAIL of all payments for Mail Transportation in Nova Scotia Postal Division, &c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Marshy Hope and Railway Station.	A. McDonald.	100 yds	3	12 months	30 00
Marydale and St. Andrews.	D. Forbes	4	1	12 do	32 00
Mattatal's Lake and Tatamagouche	A. Patriquin	9	1	12 do	40 00
Mavilette and Yarmouth	N. Bishop	20	6	8 do (to Nov. 30, '90)	249 33
do do	A. Bain	20	6	4 do from do	124 66
Meiklefield and Sutherland's Mills	W. McDonald	4	1	9 do (to Dec. 31, '90)	28 50
do do	D. Holmes	4	1	3 do from do	9 50
Merigomishe and Railway Station.	J. W. Dunn	3	12	12 do	96 00
Meteghan and Railway Station	E. E. Sheehan	5 3/4	12	12 do	200 00
Meteghan Station and Ry. Station.	F. Geddry	4	12	12 do	40 00
Middle Musquodoboit and Moose River Gold Mines.	J. Jennings	14	2	12 do	115 00
Middle Musquodoboit and Murchyville	W. McCurdy	5	2	12 do	49 00
Middle Musquodoboit and Newcomb's Corners	G. McLeod	9	1	12 do	48 00
Middle Musquodoboit and Wyse's Corner	W. McCurdy	27 r.t.	3	12 do	180 00
Middleton and Nictaux Falls	W. H. Nixon	13 r.t.	6	12 do	157 44
Middleton and Port George	R. G. Anderson	8	3	12 do	125 00
Middleton and Railway Station	L. Gullivan	12	12	12 do	60 00
Milford Station and Railway Station	G. L. Colter	12	9	9 do (to Dec. 31, '90)	30 00
do do	E. Currie	12	3	3 do from do	15 00
Mill Road and New Ross	G. Ross	5	1	12 do	40 00
Minudie and River Hebert, West Side	T. Mack	7	6	12 do	315 00
Monk's Head and Pomquet Chapel	F. Boudroit	2 1/2	3	12 do	45 00
Mooseland and Tangier	G. H. Cameron	13	1	12 do	48 00
Morden and Victoria Harbour	S. Balcom	3	1	12 do	24 00
Moser's River and West River, Sheet Harbour	J. H. Dimock	35	3	12 do	600 00
Mountain Road and River John	R. Holt	3	2	12 do	36 00
Mount Cusack and Sydney	H. Cusack	7	1	12 do	35 00
Mount Denson and Railway Station	M. J. Shaw	1 1/2	6	12 do	80 00
Mount Thom Settlement and Salt Springs	A. McKay	6	2	12 do	70 00
Mount Uniacke and Mount Uniacke Gold Mines	J. Patriquin	4	3	12 do	80 00
Mount Uniacke and Oland	E. Pentz	22 r.t.	2	12 do	120 00
Mount Uniacke and Railway Station	J. McLearn	135 yds	12	12 do	50 00
Musquodoboit Harbour and Petpeswick Harbour	B. Young	6	3	12 do	65 00
Musquodoboit Harbour and Pleasant Point	R. J. Stevens	11	2	12 do	110 00
Nappan Station and Railway Station	A. C. Barry	75 yds	12	12 do	80 00
New Campbellton and New Harris	D. Morrison	5	1	12 do	30 00
New Campbellton & North Sydney.	L. Kehoe	20	3	12 do	340 00
Mew Cumberland and West La Have Ferry	H. Corkum	9 1/2 r.t.	1	12 do	38 48
New Edinburgh & Weymouth Bridge	A. Deveau	5 1/4	2	12 do	55 00
New Glasgow and Railway Station.	J. W. Church	4	42	12 do	437 48
New Glasgow and Thorburn.	R. P. Fraser	5	6	12 do	200 00
New Glasgow and Trenton.	J. W. Church	1 1/2	6	12 do	100 00
Newport and Newport Landing	J. Wier	17 r.t.	4 & 2	12 do	225 00
Newport and Newport Station	W. Gibson	5	6	16 days (to April 16, '90).	7 91
do do	do	5	12	5 months 14 days (to Sept. 30, '90)	130 62
do do	J. F. Rathbun	5	12	6 do from do	125 00
Newport and South Radwon	J. W. Hennessey	24 r.t.	1	12 do	73 00
Newport and Upper Newport	do	10 1/2 r.t.	1	12 do	35 00
Newport and Walton	E. A. Bancroft	20	6	12 do	778 64
Newport Station and Ry. Station	L. H. Sweet	12 yds	24	12 do	50 00
New Ross and Stoddarts	G. Ross	26	2 & 1	12 do	73 00
New Ross and Vaughans	R. Boylan	15	2	12 do	139 00

DETAIL of all payments for Mail Transportation in Nova Scotia Postal Division,  
&c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts
Newville and Railway Station . . . .	D. P. Young . . .	20 yds	12	12 months . . . . .	10 00
Noël and Shubenecadie . . . . .	J. W. Singer . . .	32	1	12 do . . . . .	153 00
Noël and Walton . . . . .	J. Murray . . . .	14	6	12 do . . . . .	284 00
North End Lochaber and West Side Lochaber . . . . .	J. A. Stewart . . .	3	3	12 do . . . . .	50 00
North Range Corner & Ry. Station . .	C. B. McNeill . . .	$\frac{1}{2}$	12	12 do . . . . .	60 00
North Range and South Range . . . .	J. E. Marshall . . .	3	2	12 do . . . . .	40 00
North River Bridge and South Gut St. Ann's . . . . .	A. G. Morrison . .	14	2	12 do . . . . .	108 16
North River Bridge and Tarbut . . . .	A. Morrison . . . .	3	3	12 do . . . . .	26 00
North Side Grand Narrows and South Side Grand Narrows . . . . .	H. A. Archibald . .	1	6	12 do . . . . .	400 00
North Sydney and Port Hastings . . .	do . . . . .	87	6	12 do . . . . .	5,005 04
North-West Arm & Rear Ball's Creek . .	M. McMillan . . .	3	1	12 do . . . . .	20 00
Norwood and Railway Station . . . . .	D. A. Saunders . .	100 yds	6	12 do . . . . .	50 00
Nyanza & West Side Middle River . . .	A. McLennan . . .	4	2	12 do . . . . .	35 00
Oakfield and Railway Station . . . . .	H. D. McLeod . . .	$\frac{1}{2}$	12	9 do (to Dec. 31, '90) . .	30 00
do do . . . . .	S. C. Thompson . .	$\frac{1}{2}$	12	3 do from do . . . . .	10 00
Oban and St. Peter's . . . . .	R. Morrison . . . .	16 r.t.	2	12 do . . . . .	70 00
Odin and Stewiacke Cross Roads . . .	S. Deyarmond . . .	$7\frac{3}{4}$	2	12 do . . . . .	110 00
Old Bridgeport Mines and Main Post Road . . . . .	F. J. Mitchell . . .	1	6	12 do . . . . .	50 00
Onslow Station and Railway Station . .	A. McCurdy . . . .	$\frac{1}{2}$	12	12 do . . . . .	60 00
Outer Island Port Hood & Port Hood . .	W. D. Smith . . . .	3	3	12 do . . . . .	30 00
Oxford and Railway Station . . . . .	N. S. Thompson . .	$3\frac{1}{2}$	12	12 do . . . . .	400 00
Oxford and Rocky . . . . .	W. E. Burnside . .	16	2	12 do . . . . .	90 00
Paradise Lane and Railway Station . . .	W. F. Morse . . . .	$\frac{1}{2}$	12	12 do . . . . .	80 00
Paradise Lane and Roxbury . . . . .	W. Gormley . . . .	7	1	12 do . . . . .	35 00
Parrsboro' and Partridge Island . . . .	E. A. Jenks . . . .	2	6 & 2	3 do (to June 30, '90) . .	25 00
do do . . . . .	J. Gilbert . . . . .	2	6 & 2	9 do from do . . . . .	56 25
Parrsboro' and Railway Station . . . .	E. A. Jenks . . . .	$\frac{1}{2}$	12	12 do . . . . .	50 00
Parrsboro' and Three Sisters . . . . .	E. D. Fullerton . .	45	6	12 do . . . . .	1,166 64
Parrsboro' and Two Islands . . . . .	T. W. McKay . . .	$6\frac{1}{2}$	2	12 do . . . . .	65 00
Pictou and Pictou Island . . . . .	J. Currie . . . . .	12	1	12 do . . . . .	260 00
Pictou and Pictou Landing . . . . .	G. J. Christie . . .	$1\frac{1}{2}$	6	12 do . . . . .	235 00
Pictou and Railway Station . . . . .	W. McDonald . . .	$\frac{1}{4}$	36	12 do . . . . .	225 00
Pictou and River John . . . . .	W. Gammon . . . .	20	6	12 do . . . . .	475 00
Pictou and River John ( <i>vid</i> shore) . . .	D. M. Geldert . . .	29	2	12 do . . . . .	350 00
Pictou and Truro . . . . .	W. Gammon . . . .	50 $\frac{1}{2}$	3	12 do and arrears . . . .	932 27
Pictou and West River Station . . . .	T. G. Anderson . .	25 $\frac{1}{2}$	3	12 do . . . . .	342 56
Pictou and Steamer (P.E.I. mails) . . .	E. McPhail . . . .			Season 1889-90 . . . . .	50 00
do do . . . . .	B. Flynn . . . . .			Season 1890-91 . . . . .	23 40
Piedmont Valley and Ry. Station . . .	J. A. McDonald . .	$\frac{1}{2}$	3	12 months . . . . .	24 00
Pine Tree and Railway Station . . . .	R. Mitchell . . . .	$1\frac{1}{2}$	3	12 do . . . . .	60 00
Pirate Harbour and Railway Station . .	R. Peebles . . . . .	$\frac{1}{2}$	12	12 do . . . . .	80 00
Pirate Harbour & St. Francis Harbour . .	H. Whooten . . . .	18	3	12 do . . . . .	220 00
Pleasant Valley and Railway Station . .	L. Craig . . . . .	$1\frac{1}{2}$	2	12 do . . . . .	50 00
Plympton and Railway Station . . . .	J. L. Warner . . . .	3	12	12 do . . . . .	140 00
Point Edward and Sydney . . . . .	D. Beaton . . . . .	8	1	12 do . . . . .	40 00
Pomquet Chapel and Ry. Station . . . .	C. Duong . . . . .	2	6	12 do . . . . .	70 00
Port Acadie and Railway Station . . . .	V. Thibodeau . . .	2 $\frac{1}{2}$	12	12 do . . . . .	150 00
Port Beckerton and Port Hillford . . .	G. S. Taylor . . . .	8	1	12 do . . . . .	52 00
Porter's Lake and West Chezzetcook . .	C. H. Richey . . . .	3	3	9 do (to Dec. 31, '90) . .	45 00
do do . . . . .	J. T. Bishop . . . .	$4\frac{1}{2}$	3	3 do from do . . . . .	20 00
Port Hastings and Point Tupper . . . .	A. McDonald . . . .	5 $\frac{1}{2}$		Special service . . . . .	14 00
do do . . . . .	H. A. Archibald . .	5 $\frac{1}{2}$		do . . . . .	334 00
Port Hastings and Port Hawkesbury . .	A. McDonald . . . .	$3\frac{1}{2}$	12	12 months . . . . .	220 00
Port Hastings and Railway Wharf . . . .	H. A. Archibald . .	$\frac{1}{2}$	12	12 do . . . . .	156 50
Port Hawkesbury and Ry. Wharf . . . .	A. McDonald . . . .	$\frac{1}{2}$	12	12 do . . . . .	156 50
do do . . . . .	A. A. Beaton . . . .	$\frac{1}{2}$	as req.	Season 1890 . . . . .	26 80
Port Hawkesbury and Sydney . . . . .	J. Morrison . . . .	100	6	12 months . . . . .	9,000 00
Port Hawkesbury Railway Wharf and Point Tupper . . . . .	A. McDonald . . . .	$1\frac{1}{2}$		Special trips . . . . .	218 00
Port Hood and Port Hood Island . . . .	J. Smith . . . . .	$1\frac{1}{2}$	2	12 months . . . . .	45 00



DETAIL of all payments for Mail Transportation in Nova Scotia Postal  
Division, &c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Port Joli and St. Catharines River.	L. Robertson...	5	1	12 months	40 00
Port Matoon and South-West Port	C. Thériau...	4	1	12 do	25 00
Matoon	R. Tritts...	$\frac{1}{2}$	12	do	80 00
Port Mulgrave and Railway Wharf.	G. A. King...	$4\frac{1}{2}$	3	do	60 00
Port Philip and Pugwash.	A. McDonald...	3	3	do	100 00
Port Royal and West Arichat.					
Port Williams and Port Williams	J. L. Bishop...	1	6	12 do	70 56
Station	E. Burbidge...	$2\frac{1}{2}$	3	12 do	55 00
Port Williams and Town Plot					
Port Williams Station and Railway	F. E. Forsyth...	12 yds	24	12 do	62 60
Station					
Port Williams Station and White	J. L. Bishop...	$4\frac{1}{2}$	3	12 do	67 00
Rock Mills	D. Deloughrey...	$\frac{1}{4}$	6	12 do	60 00
Preston and Main Post Road.	J. D. Nelson...	16 r.t.	6 & 2	12 do	240 00
Princeport and Truro.	J. R. Lamy...	$15\frac{1}{2}$	6	12 do	461 88
Pugwash and Thompson's Mills.					
Quinan and Tusket.	L. Porter...	12	2	12 do	90 00
Rear Black River and West Bay.	M. Morrison...	4 r.t.	2	12 do	70 00
River Bourgeoise and River Tear.	J. Murphy...	3	6	7 do (to Oct. 31, '90)	69 41
do do	J. Morrison...	3	6	5 do from do	40 41
Riversdale and Weymouth Bridge.	J. H. Sabean...	10	1	12 do	40 00
River Hebert and River Hebert					
Station	T. A. Lowther...	$1\frac{1}{2}$	12	12 do	200 00
River Hebert, West Side, and Shulie	B. Baird...	14	3	12 do	273 00
River Inhabitants Bridge and West					
Bay	P. McFarlane...	5	6	12 do	145 00
River John and Tatamagouche.	J. McLeod...	13	6 & 3	12 do	400 00
River John and Welsford	J. A. McKay...	3	3	12 do	40 00
Riversdale and Railway Station.	B. A. Wall...	$\frac{1}{16}$	12	7 do (to Oct. 31, '90)	25 66
do do	D. Fraser...	$\frac{1}{16}$	12	5 do from do	18 33
Riversdale and Upper Kemptown.	K. J. McLean...	$8\frac{1}{2}$	2	12 do	163 20
Rockingham and South Ohio.	J. E. Allen...	11 & 9	3 & 2	12 do	225 00
Rockingham Station and Ry. Station	L. E. Smith...	$\frac{1}{2}$	12	12 do	80 00
Roman Valley and St. Andrews.	W. A. McDonald...	15	3	12 do	177 00
Round Hill and Railway Station.	C. E. Spurr...	$\frac{1}{8}$	12	12 do	75 00
St. Andrews and Vernal.	L. Cameron...	5	2	12 do	53 00
St. Peters and West Bay.	A. McDougall...	28	3	12 do	285 00
Sable River and Swansburg.	W. Herkins...	$10\frac{1}{2}$	3	12 do	200 00
Salem and Stanley.	H. Logan...	2	2	8 do (from Aug. 1, '90)	26 66
Salt Springs Station and Ry. Station	J. W. Black...	20 yds	12	12 do	20 00
Sandford and Yarmouth.	N. L. Trefry...	20 r.t.	2	12 do	123 72
Sand River and Shulie.	E. J. White...	7	2	1 do (to April 30, '90)	9 58
do do	do	7	3	11 do from do	158 11
Saulnierville and Railway Station.	T. H. Saulnier...	$1\frac{3}{4}$	12	12 do	100 00
Saulnierville Station and Ry. Station	B. Comeau...	$\frac{1}{8}$	6	10 do (from June 1, '90)	20 83
Scotch Village and Woodville.	S. Cochran...	10	1	12 do	45 00
Shad Bay and Whites (Prospect					
Road)	M. Burke...	2	4	12 do	45 00
Shelburne and Upper Ohio.	W. G. Swines-				
	burg...	38 r.t.	1	12 do	82 32
Sherbrooke and West River. Sheet					
Harbour.	J. S. Cameron...	60	3	12 do	750 00
Ship Harbour Lake and Ship Har-					
bour Lake (circular route)	J. W. Webber...	23 r.t.	1	12 do	100 00
Shubenacadie and Railway Station.	A. Kirkpatrick...	106 yds	36	12 do (and arrears)	164 03
Six Mile Brook and West River.	J. McKay...	6	2	12 do	30 00
Six Mile Road and Wallace Grant.	C. Cook...	5	3	2 do (to May 31, '90)	10 00
do do	do	$5\frac{1}{2}$	3	10 do from do	55 00
Skye Mountain and Whyecomagh.	A. G. Nicholson...	6	1	12 do	30 00
Sluice Point and Surette Island.	J. J. Surette...	2	1	12 do	25 00
Sluice Point and Tusket.	A. J. Lent...	6	1	12 do	40 00

DETAIL of all payments for Mail Transportation in Nova Scotia Postal Division,  
&c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Sober Island and Watt Section, Sheet Harbour.....	D. Logan. ....	6	3	12 months .....	80 00
Somerset and Railway Station (Berwick).....	G. W. Kinsman. ....	23	4	12 do .....	70 00
Southampton and Railway Station..	G. S. Davison. ....	12	12	do .....	75 00
South Branch and Upper Stewiacke	G. Cox. ....	19 r. t.	3	12 do .....	98 00
South Farmington and Ry. Station..	A. W. Randall. ....	11	12	do .....	36 00
South Harbour and White Point....	J. McPherson. ....	9	2	12 do .....	95 00
South Merland and Tracadie.....	M. Delorey. ....	8	1	12 do .....	34 00
South Ohio and Railway Station....	W. Crosby. ....	1	12	do .....	40 00
South West Margaree and Upper Margaree.....	J. S. McDonald. ....	4	2	12 do .....	34 48
Spring Hill Junction and R'y Station	J. A. Dunn. ....	1	12	do .....	40 00
Spring Hill Mines and R'y Station..	J. Anderson. ....	2	24	12 do .....	240 00
Spring Hill Mines and Windham Hill.....	A. A. Schurman. ....	7	2	12 do .....	80 00
Stellarton and Railway Station ....	J. Bartley. ....	1	36	12 do .....	225 00
Strathlorne and Whycomagh.....	J. A. McKinnon. ....	26	2	12 do .....	228 00
Tatamagouche and Waugh's River..	J. Lombard. ....	12 r. t.	3	12 do .....	140 00
Tatamagouche and Wentworth Station.....	A. Purdy. ....	20	6	12 do .....	440 00
The Falls and West New Annan .....	D. C. Byers. ....	9	3	12 do .....	172 04
Thompson's Mills and R'y Station..	S. Jones. ....	4	12	5 do (to Feb. 28, '91).	16 66
do do .....	J. S. Ross. ....	4	12	1 do from do ..	3 33
Thompson's Mills and Westchester.	E. J. Purdy. ....	13	2	12 do .....	150 00
Thorburn and Merigomishe Station..	A. Weir. ....	5	6	12 do .....	239 30
Torbrook and Tremont .....	W. Brown. ....	5	1	12 do .....	50 00
Tracadie and Railway Station.....	P. Delorey. ....	1	12	12 do .....	60 00
Truro, Railway Station and Street Letter Box.....	C. B. Archibald. ....	1/2 & 1/4	60 & 18	12 do .....	400 00
Truro, Railway Station Letter Box and Postal Cars .....	do .....	50 yds	36	12 do .....	25 00
Tuppersville and Railway Station...	D. S. Chipman. ....	1/4	12	12 do .....	50 00
Tusket Wedge and Yarmouth.....	B. LeBlanc. ....	12	6	12 do .....	200 00
Upper Musquodoboit and West River, Sheet Harbour. ....	J. S. Stewart. ....	26	3	12 do .....	394 00
Upper Newport and Woodville.....	E. Sweet. ....	1 1/2	1	12 do .....	13 44
Valley Station and Railway Station	M. A. Johnson. ....	600 yds	12	12 do .....	40 00
Waterville and Railway Station....	J. S. Pineo. ....	70 yds	12	12 do .....	50 00
Waterville and South Waterville....	F. Parrish. ....	11 r. t.	1	12 do .....	32 00
Waverley and Windsor Junction.....	J. Otto. ....	3	6	12 do .....	130 00
Wentworth Creek and Windsor.....	J. Trider, sen. ....	2 1/2	3	12 do .....	70 00
Wentworth Station and R'y Station	A. Barclay. ....	135 yds	12	12 do .....	60 00
West Branch River Philip and River Philip Station .....	M. Chapman. ....	5	6	12 do .....	180 00
Westbrook and Railway Station....	J. C. Taylor. ....	1	12	12 do .....	104 00
Westbrook Mills and R'y Station .....	S. Roscoe. ....	1	12	12 do .....	100 00
West Merigomishe and R'y Station..	J. R. McDonald. ....	1	6	12 do .....	40 00
West River Station and R'y Station	D. Graham. ....	75 yds	12	3 do (to June 30, '90).	10 00
do do .....	M. B. Fraser. ....	75 yds	12	9 do from do ..	30 00
Westville and Railway Station.....	J. Maxwell. ....	1	24	12 do .....	120 00
Weymouth and Railway Station....	C. D. Jones. ....	1 1/2	12	12 do .....	156 00
Weymouth Bridge and R'y Station..	G. J. Hoyt. ....	1	12	12 do .....	40 00
Wilnot and Railway Station.....	E. Cumming. ....	1 1/2	12	12 do .....	95 00
Windsor and Railway Station .....	P. S. Burnham. ....	1	24	12 do .....	280 00
Windsor Junction and R'y Station..	P. Hessian. ....	1 1/2	36	12 do .....	80 00
Windsor Junction-Postal Car Transfer.....	do .....	20 yds	6	9 do 20 days (from June 10, '90) ..	48 60

DETAIL of all payments for Mail Transportation in Nova Scotia Postal Division,  
&c.—*Concluded.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Windsor Junction--Postal Car Transfer.....	W. Herbert.....	20 yds	6	12 months .....	60 00
do do .....	A. Gammon .....	20 yds	6	2 do 7 days (to June 7, '90) .....	11 16
Wolfville and Railway Station.....	G. V. Rand. ....	$\frac{1}{8}$	24	12 do .....	100 00
Woodbourne and Railway Station..	D. Ballentyne ..	$1\frac{1}{2}$	2	12 do .....	50 00
Yarmouth and Railway Station....	A. Bain.....	$\frac{1}{2}$	12	12 do .....	149 00
Yarmouth and Street Letter Boxes.	A. J. Hood.....	2	12	12 do .....	120 00
				Total.....	\$130,302 72

WILLIAM WHITE,  
*Deputy Postmaster-General.*

W. H. SMITHSON,  
*Accountant.*



## OTTAWA POSTAL DIVISION.

DETAIL of all payments for Mail Transportation in Ottawa Postal Division.  
made within the year ended 30th June, 1891.

Name of Route.	Name of Contractor.	Distance Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Alexandria and McCrimmon.....	D. McCrimmon.	9	6	12 months.....	240 00
Alexandria and Railway Station...	A. J. McDonald	1	24	12 do .....	112 68
Alexandria and St. Raphael West...	J. McDougall...	17	6	12 do .....	325 00
Alexandria and Vankleek Hill.....	A. Mercier.....	19	6	12 do .....	350 00
Alfred and Montebello.....	L. Larocque.....	9	6	12 do .....	200 00
Allumette Island and Pembroke....	J. J. McGuire....	7	2	12 do .....	85 00
Almonte and Carleton Place.....	J. Miller.....	8	6	2 do 3 days (to June 14, '90).....	35 72
Almonte and Clayton.....	A. Barnett.....	10 & 12	6	12 do .....	225 00
Almonte and Railway Station.....	E. Dowdall.....	$\frac{1}{4}$	24	12 do .....	164 63
Almonte and West Huntley.....	B. Manion.....	12	3	12 do .....	196 00
Althorpe and Maberly.....	J. Norris.....	9	2	12 do .....	84 49
Angers and Railway Station.....	L. Moncion.....	$\frac{1}{4}$	6	12 do .....	60 00
Annesley and North Onslow.....	P. Killoran.....	4	1	12 do .....	35 00
Appleton and Carleton Place.....	J. N. Eastwood..	$4\frac{1}{4}$	12	12 do .....	195 00
Archer and Bouck's Hill.....	J. Cramer.....	9	3	12 do .....	112 00
Arnprior and Fitzroy Harbour.....	H. Somerville....	12	6	12 do .....	274 00
Arnprior and Railway Station.....	H. Hatton.....	$\frac{3}{4}$	24	12 do .....	175 28
Arnprior and White Lake.....	P. Doolan.....	33	6	12 do .....	515 00
Arundel and Rockway Valley.....	C. Sinclair.....	5	1	12 do .....	30 00
Ashton and Prospect.....	W. Burrows.....	11	3	12 do .....	235 00
Ashton and Railway Station.....	H. S. Conn.....	2	6	12 do .....	100 00
Aultsville and Bush Glen.....	G. Bush.....	9	2	12 do .....	100 00
Aultsville and East Williamsburg..	G. A. Summers..	3	6	12 do .....	72 00
Aylmer and Ottawa.....	A. M. Holt.....	9	.....	Special trip.....	1 50
Aylmer and Railway Station.....	do.....	$\frac{1}{4}$	24	12 months.....	208 66
Baie des Pères and Haileybury....	C. C. Farr.....	14	1	12 do .....	50 00
Baie des Pères and Lake Temiscamingue .....	J. Mann.....	3	1	12 do .....	30 00
Baie des Pères and North Temiscamingue .....	A. McBride.....	22	1	12 do .....	200 00
Bainsville and Railway Station....	D. McCuaig.....	$\frac{3}{4}$	12	12 do .....	60 00
Ballinville and South March.....	P. Orchard.....	4	2	12 do .....	40 00
Bark Lake and Brudenell.....	M. & J. Billings.	22	1 & 2	12 do .....	190 00
Bark Lake and Murchison.....	B. Reynolds.....	17	1	12 do .....	120 00
Barryvale and Railway Station.....	P. Barry.....	150 yds	6	12 do .....	15 00
Basin Depot and Eganville.....	R. Reeves.....	49	2	12 do .....	525 00
Basin du Lievre & Railway Station..	F. X. Nanaville..	$\frac{1}{2}$	6	12 do .....	66 00
Beachburg and Gower Point.....	T. M. Carswell..	9	2	12 do .....	110 00
Beachburg and Westmeath.....	H. A. O'Brien..	7	6	6 do (to Sept. 30, '90).	90 00
Bearbrook and Canaan.....	R. Bowden.....	19	3	6 do from do .....	200 00
Bearbrook and Railway Crossing....	do.....	3	6	12 do .....	100 00
Beckstead and Dunbar.....	A. J. Colquhoun..	13	3	12 do .....	116 00
Beechgrove and Quyon.....	S. Mohr.....	$4\frac{1}{2}$	3	12 do .....	100 00
Bell Mount and Otter Lake.....	G. Palmer.....	6	2	12 do .....	55 00
Benoit's Mills and Nosbonsing.....	E. Benoit.....	6	3	12 do .....	50 00
Billerica and Railway Station.....	E. A. Pritchard..	$\frac{1}{6}$	6	12 do .....	20 00
Biscotasing and Railway Station....	P. J. Finlan.....	50 ft.	12	12 do .....	15 65
Bishop's Mills and Prescott.....	C. W. Knapp.....	16	3	12 do .....	255 00
Bissett's Creek and Railway Station	C. Carmichael..	20 yds	12	12 do .....	24 00
Blackburn and Orleans.....	R. Dagg.....	3	2	12 do .....	50 00
Blanche and Thurso.....	M. McAndrews..	16	3	12 do .....	180 00
Bois Franc and Mattawa.....	C. Rankin.....	40	1	12 do .....	400 00
Booth and Dumoine.....	J. Lafrenier.....	46	1	12 do .....	300 00
Borromee and Orleans.....	A. Chartrand....	4	1	12 do .....	25 00
Bouck's Hill and Froatsburn.....	W. Lapointe....	4	2	12 do .....	40 00
Bowesville and Railway Station....	P. Nelligan.....	2	3	12 do .....	60 00
Braeside and Railway Station.....	J. Gillies.....	$1\frac{1}{6}$	12	12 do .....	50 00
Bray's Crossing & Railway Station..	C. Bray.....	20 yds	2	12 do .....	10 00

DETAIL of all payments for Mail Transportation in Ottawa Postal Division,  
&c.—Continued.

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Breadalbane and Vankleek Hill...	C. Campbell...	5	3	12 months	60 00
Bristol and Glengyle...	G. Morrison...	10	6	12 do	200 00
Britannia Bay and Railway Station	C. Hand...	$\frac{1}{4}$	12	6 do (to Sept. 30, '90).	20 00
Brockville and Railway Station...	W. Curry...	1	18	12 do	211 28
do do	J. Cavanagh...	1	14	12 do	91 25
Brockville, C. P. R. and G. T. R.					
Transfer	do	20 yds	as req.	12 do	370 00
Brockville Junc.—G. T. R. Transfer	do			3 do (from Jan. 1, '91)	9 00
Brockville and Morristown, U. S.	T. Burns...	2	6	12 do	148 00
Brockville and Street Letter Boxes.	J. McKenny...	$3\frac{1}{2}$	as req.	12 do	100 00
Brockville and Wemyss...	B. McKeracher...	3	2	12 do	65 25
Brudenell and Castile...	E. Bennet...	9	1	12 do	80 00
Brudenell and Emmett...	E. Ring...	$13\frac{1}{2}$	2	12 do	127 40
Bryson and Portage du Fort...	J. Murtagh...	8	6	12 do	200 00
Bryson and Railway Station	do	5	12	12 do	195 00
Buckingham and High Rock...	C. W. Pearson...	$23\frac{1}{2}$	6 & 3	12 do	600 00
Buckingham and Railway Station...	do	$4\frac{1}{2}$	12	12 do	97 00
Burnstown and Springtown...	A. Wilson...	5	3	12 do	80 00
Burritt's Rapids & North Montague	J. A. Ommrod...	7	1	12 do	52 00
Cache Bay and Railway Station...	J. Jessup...	$\frac{5}{2}$	12	12 do	44 57
Cahore and Cryslar...	G. S. Johnstone...	4	3	12 do	62 00
Calabogie and High Falls...	T. Dillon...	7	1	12 do	43 08
Calabogie and Railway Station	D. Dillon...	$\frac{1}{4}$	6	12 do	58 00
Caldwell and Glengyle...	R. Horner...	1	6	12 do	50 00
Caldwell's Mills and Ry. Station...	W. Reid...	$\frac{3}{4}$	6	12 do	40 00
Caledonia Springs and L'Orignal	I. Lalonde...	9	3	12 do	155 00
do do	do	9	3	Season, 1890	63 00
Calumet and St. Remi d'Amherst...	L. Champagne...	39	1	12 months	280 00
Calumet Island and Campbell's Bay	J. E. Cahill...	$1\frac{1}{2}$	13	12 do	93 33
Calumet Island and Dunraven	C. Barsalou...	5	3	12 do	78 00
Camerontown and Railway Station...	E. Cameron...	200 yds	12	3 do (to June 30, '90)	12 48
do do	J. A. Cameron...	200 yds	12	9 do from do	37 60
Camerontown and Summerstown...	A. Cameron...	3	6	12 do	96 00
Campbell's Bay and Railway Station	P. McNally...	40 yds	6	12 do	10 00
Cantley and Kirks Ferry...	M. Reid...	3	3	12 do	90 00
Cantley and Lucerne...	R. Blackburn...	19	1	12 do	125 00
Cardinal and Hyndman...	J. Hyndman...	13	3	12 do	200 00
Cardinal and Railway Station...	W. Stitt...	1	14	12 do	73 00
Carleton Place and Railway Station	P. P. Salter...	$\frac{3}{4}$	36	12 do	416 40
Carleton Place and Scotch Corners...	D. Sinclair...	7	1	12 do	40 00
Carp and Elm...	W. Falls...	3	3	12 do	75 00
Carsonby and North Gower...	A. Eastman...	$3\frac{1}{2}$	3	12 do	75 00
Carswell and Railway Station...	D. Carswell...	3	2	12 do	53 00
Cartier and Railway Station...	C. B. McTague...	20 ft.	12	3 do (to June 30, '90)	2 50
do do	E. Fry...	20 ft.	12	9 do from do	7 50
Cashion's Glen and Cornwall...	J. J. Cashion...	15	3	12 do	268 69
Casselman and Railway Station...	B. Coriar...	11	6	6 do (to Sept. 30, '90).	98 50
do do	A. Goulet...	11	6	6 do from do	122 50
do do	R. R. McLeod...	$\frac{1}{2}$	12	12 do	34 00
Castleford and Railway Station...	J. B. Dickson...	200 yds	12	12 do	10 00
Cawood and Danford Lake...	G. Tanner...	9	1	12 do	52 00
Cedar Hill and Pakenham...	S. Connery...	$5\frac{1}{2}$	2	12 do	80 00
Chalk River and Railway Station...	T. Field...	$2\frac{1}{2}$	12	12 do	100 00
Chapeau and Fort Coulonge...	J. G. Poupore...	21	3	12 do	345 00
Chapeau, Pembroke & Fort William	A. S. Moloney...	22	6 & 3	3 do (to June 30, '90)	124 75
Chapleau and Railway Station...	T. A. Austin...	$\frac{1}{8}$	12	3 do (to June 30, '90)	18 75
do do	J. M. Austin (Executor)...	$\frac{1}{8}$	12	9 do from do	56 25
Chard and Pendleton...	W. J. Brown...	4	2	12 do	56 00
Charteris and North Clarendon...	J. Ralph...	3	3	12 do	40 00
Chelsea and Old Chelsea...	G. Edmonds...	$1\frac{1}{4}$	6	12 do	60 00
Chelsea and Ottawa...	R. Hastey...	9	6	12 do	200 00
Cheneville and Duhamel...	F. D. Larose...	13	1	4 do (from Dec. 1, '90)	17 33

DETAIL of all payments for Mail Transportation in Ottawa Postal Division,  
&c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Cheneville and Namur.....	F. Farant.....	9	3	6 months (to Sept. 30, '90)	65 00
do do.....	J. Binda.....	9	3	6 do from do	65 00
Cheneville & Papineauville Station.	H. N. Raby.....	23	6	12 do	230 00
Chesterville and Connaught..	P. Jordan.....	5	2	6 do (to Sept. 30, '90).	40 00
do do.....	J. Jordan.....	5	2	6 do from do	45 00
Chesterville and Morewood.....	H. Dillabough.....	8	6	12 do	142 00
Chesterville and Morrisburg.....	J. S. Marselis.....	18½	6	12 do	550 00
Chesterville and Railway Station..	P. Heveran.....	12	3	do (to June 30, '90)	30 00
do do.....	F. A. Durant.....	12	9	do from do	67 50
Chichester, Pembroke and Fort William.....	A. S. Maloney.....	22	6 & 3	9 do (from July 1, '90)	374 25
Chute aux Iroquois and L'Annonciation.....	P. Marinier.....	16	1	12 do	75 00
Chute aux Iroquois and St. Jovite..	do.....	20	2	12 do	180 00
Clarence Creek and The Lake.....	S. Ouellette.....	5	2	12 do	50 00
Clarence Creek and Thurso Railway Station.....	F. Laflamme.....	8	6	12 do	225 00
Clayton and Halpenny.....	I. Halpenny.....	5	1	12 do	30 00
Clayton and Rosetta.....	G. McFarlane.....	6	2	12 do	100 00
Clayton and Tatlock.....	P. Guthrie.....	14	3	12 do	168 00
Clontarf and Foymount.....	H. R. McDonald.....	8	3	12 do	156 00
Cobden and Railway Station.....	J. Ross.....	1¼	12	12 do	62 50
Cobden and Westmeath.....	G. Pettigrew, sen.....	20	6	6 do (from Oct. 1, '90)	250 00
Collfield an Railway Station.....	M. Hughes.....	1	6	12 do	50 00
Combermere and Eganville.....	M. Furlong.....	35	6	12 do	300 00
Cornwall and Railway Station.....	J. McFarlane.....	1	1	12 do	13 00
Cornwall and St. Andrews West.....	J. Rivier.....	7	3	12 do	195 00
Cornwall and Street Letter Boxes..	D. McCracken.....	13½	12	12 do	281 70
do do.....	A. McGillis.....	13½	12	12 do	281 70
Cornwall and Tayside.....	D. J. Rivier.....	24	3	12 do	360 00
Cornwall Centre and Milleroches.....	W. M. Myers.....	2½	3	12 do	68 00
Crysler and Wales.....	S. E. Onderkirk.....	23	6	12 do	499 00
Cumberland and Railway Station.....	J. Winsor.....	2½	12	12 do	150 00
Curry Hill and River Beaudette.....	M. C. Curry.....	5	3	12 do	100 00
Cushing and Little Rideau.....	J. Little.....	4½	6	12 do	170 00
Dacre and Esmonde.....	P. Curry.....	6	2	12 do	60 00
Dacre and Griffith.....	C. Holmes.....	20	2	12 do	200 00
Dacre and Renfrew.....	D. Brownlee.....	22	3	12 do	375 00
Dalkeith and Glen Robertson.....	M. Robinson.....	8	6	12 do	196 00
Danford Lake and Kazabazua.....	H. Heeney.....	9	3	12 do	135 00
Danford Lake and Otter Lake.....	do.....	19	1	12 do	127 00
Davis Mills and Pembroke.....	R. Davis.....	8	1	12 do	45 00
Deux Rivières and Railway Station.	T. Legge.....	¼	12	12 do	100 00
Diamond and Kinburn.....	D. McMillan.....	4	3	12 do	80 00
Dickinson and Railway Crossing.....	L. E. Wood.....	3	3	12 do	70 00
Dirleton and Fitzroy Harbour.....	J. Drummond.....	7½	2	6 do (to Sept. 30, '90).	30 00
do do.....	J. Drummond, sr.....	7½	2	6 do from do	30 00
Dixon's Corner's and Dundela.....	J. E. Tuttle.....	4	3	12 do	75 00
Dixon's Corners and Pleasant Valley	G. Gilmer.....	10½	3	12 do	134 00
Dominionville and Morrisonville.....	R. Morrison.....	2½	2	12 do	45 00
Douglas and Burgess' Corners.....	J. Biledo.....	5	6	12 do	140 00
Douglas and Grattan.....	M. B. McFarlane.....	7	2	12 do	70 00
Doyle and Sheenboro.....	J. Bush.....	12	1	12 do	70 00
Duclos and East Aldfield.....	C. V. Casault.....	6	1	9 do (from July 1, '90)	26 25
Duclos and Wakefield.....	S. F. Gatignol.....	15	2	12 do	95 00
Dunbar and Grantley.....	J. C. Munro.....	5	3	12 do	70 00
Duromoe and Spence's Corners.....	L. McIntomney.....	3	3	12 do	60 00
Duurobin and South March.....	P. Orchard.....	18	3	12 do	150 00
Dunrobin and Woodlawn.....	W. H. Wilson.....	4	3	12 do	80 00
Eardley and Railway Station.....	W. H. Maclean.....	¾	6	12 do	60 00
Eastman's Spring and Ry. Station.	R. J. Kyle.....	12	12	12 do	40 56
East Nempleton and Perkins.....	C. Robitaille.....	9	2	12 do	100 00



DETAIL of all payments for Mail Transportation in Ottawa Postal Division,  
&c.—Continued.

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
East Templeton and Ry. Station....	P. Devost .....	1	12	12 months .....	110 00
Eauclaire and Railway Station....	W. Mackey.....	$\frac{1}{4}$	6	12 do .....	40 00
Eganville and Cobden Ry. Station..	N. O'Shaughnessy	18	12	12 do .....	1 00
Eganville and Golden Lake.....	S. Sunstrum, sr.	15	2	12 do .....	180 00
Eganville and Pembroke.....	M. J. McCann..	26	3	12 do .....	324 00
Elliott and Manion .....	J. DeWitt .....	7	2	12 do .....	50 00
Elmside and Bristol Mines.....	R. Campbell .....	3	3	12 do .....	75 00
Elmside and Railway Station.....	do .....	$3\frac{1}{2}$	6	12 do .....	125 00
Emmett and Wilno.....	J. O'Grady.....	5	1	12 do .....	50 00
Fairfield East and Railway Station.	A. C. Johns. ....	$\frac{1}{10}$	3	12 do .....	31 20
Farran's Point and Osnabrock Centre, &c.....	G. Kerr .....	6 & $1\frac{1}{2}$	12 & 6	12 do .....	313 00
Farrellton and Stagsburn.....	A. McDonald....	6	1	12 do .....	40 00
Felton and Russell.....	C. York.....	4	2	12 do .....	50 00
Fenaghvale and St. Amour.....	M. Poirier .....	$2\frac{1}{2}$	2	12 do .....	27 47
Ferguson's Falls and Perth.....	J. Foy.....	18	6	12 do .....	363 51
Flower Station and Railway Station.	S. M. Lyon.....	$\frac{1}{10}$	12	12 do .....	15 00
Forrester's Falls and Ry. Crossing..	G. Pettigrew....	17	6	6 do (to Sept. 30, '90).	272 50
Fort Coulonge and Railway Station	J. G. Bryson....	$\frac{1}{3}$	6	12 do .....	70 00
Fournier and Routhier.....	J. O. Poirier .....	6	6	12 do .....	189 00
Franktown and Railway Station....	J. Lightbody .....	$1\frac{1}{2}$	12	2 do 17 days (to June 17, '90)	32 15
do do .....	J. Edwards.....	$1\frac{1}{4}$	12	9 do 13 days, from do	117 85
Galbraith and Middleville.....	R. J. Penman....	$6\frac{1}{2}$	2	12 do .....	52 00
Genglye and Railway Station.....	G. Morrison.....	50 yds	6	12 do .....	10 00
Glenmore and Maitland.....	E. Coville .....	9	3	12 do .....	145 00
Glen Robertson & North Lancaster.	M. Besner .....	25	6	12 do .....	300 00
Glen Robertson and Railway Station	M. Robinson....	$\frac{1}{2}$	24	12 do .....	60 00
Glen Robertson and Ste. Anne de Prescott .....	A. Pilon.....	7	6	12 do .....	115 00
Glen Roy and Munro's Mills.....	M. Munroe.....	4	3	12 do .....	88 62
Glen Smail and Spencerville.....	E. Ellis, jun....	3	2	12 do .....	50 00
Goldfield and South Finch.....	M. McLean.....	$2\frac{1}{2}$	3	12 do .....	55 00
Goodstown and Richmond.....	T. H. Mills.....	3	2	12 do .....	40 00
Greenfield and Railway Station....	A. McDougall .....	1	24	12 do .....	125 00
Greer Mount and Thorne Centre....	G. McDowell....	6	3	12 do .....	78 00
Griffith and Metawatchan.....	J. McGregor.....	13	1	12 do .....	67 60
Groveton and Spencerville.....	J. McAuley.....	3	2	12 do .....	48 00
Hallville and Kemptville .....	J. Dickinson....	13	3	12 do .....	235 00
Halverson and Martin's Lake.....	J. C. Martin....	5	1	12 do .....	40 00
Halverson and Masham Mills.....	J. Moore.....	11	2	12 do .....	100 00
Hathaway and Railway Station....	W. Cosgrove....	$1\frac{1}{2}$	6	12 do .....	50 00
Hazledean and Stittsville.....	A. Abbott.....	$3\frac{1}{2}$	3	12 do .....	75 00
Henry and L'Original.....	S. Buchan.....	$4\frac{1}{2}$	3	12 do .....	76 00
Heyworth and Railway Station....	H. McVeigh.....	2	6	12 do .....	80 00
High Rock and Notre Dame de Laus	D. Vincent.....	$31\frac{1}{2}$	1	12 do .....	271 54
High Rock and Poltimore.....	J. H. Bonsall....	6	3 & 2	9 do (to Dec. 31, '90).	56 25
do do .....	J. Robinson.....	6	3 & 2	3 do from do	17 50
Hintonburgh and Mechanicsville....	W. J. White.....	1	3	10 do (to Jan. 31, '91)..	29 17
Holland Mills and Chalifoux Point.	G. Gowan.....	$2\frac{1}{2}$	3	12 do .....	60 00
Hopetown and Lanark.....	W. Maguay.....	7	3	12 do .....	75 00
Hopetown and White .....	R. Jordan.....	12	1	12 do .....	55 00
Hull and Ottawa .....	J. Goodman.....	2	12	15 do .....	312 00
Hull, Ottawa and Railway Station.	B. D'Arpentigny	2 & 1	18 & 30	13 do (to June 30, '91).	541 68
Hull and Street Letter Boxes .....	M. LeBlanc.....	$3\frac{1}{2}$	12	12 do .....	144 49
Hurtubise and Casselman Station..	E. N. Hurtubise	2	12	12 do .....	30 00
Inkerman and Iroquois .....	A. Serviss.....	23 & 17	6	3 do (to June 30, '90).	89 23
do do .....	F. H. McKnight	23 & 17	6	9 do from do ..	243 00
Irena and Rowena.....	T. S. Carter.....	3	3	12 do .....	80 00

DETAIL of all payments for Mail Transportation in Ottawa Postal Division,  
&c.—Continued.

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Jockvale and Ottawa .....	J. Clothier.....	15	3	12 months .....	215 01
Joynt and North Wakefield .....	R. Joynt.....	12½	2 & 3	12 do .....	231 24
Kazabazua and Lake St. Mary.....	B. Emond.....	5	2	9 do from July 1, '90 ..	66 00
Kazabazua and Venosta .....	J. McCaffrey.....	7	1	12 do .....	50 00
Kemptville and Merrickville.....	C. W. Putnam.....	18	6	12 do .....	557 64
Kemptville and North Rideau.....	A. W. Powell.....	5½	2	8 do from Aug. 1, '90 ..	40 00
Kemptville and Railway Station.....	W. Dickinson.....	1	18	12 do .....	272 31
Kemptville and South Gower.....	A. W. Tomkins.....	11	3	12 do .....	173 00
Kemore and North Branch.....	P. A. Harrison.....	4	6	12 do .....	75 00
Killaloe and Ruby.....	J. Rankin.....	7½	2	12 do .....	90 00
Kilmarnock and Smith's Falls.....	W. G. Halliday.....	8½	2	12 do .....	105 00
Klock's Mills and Railway Station.....	J. B. Klock.....	½	12	12 do .....	10 00
Lac Rond and Namur .....	B. Corbeil.....	7	1	12 do .....	40 00
Lake St. Mary and Kazabazua.....	X. Neveille.....	5	2	3 do (to June 30, '90).....	25 00
Lake Talon and Railway Station.....	F. McDonald.....	100yds	6	12 do .....	20 00
Lake Témiscamingue and Mattawa.....	E. J. Smith.....	140	1	12 do .....	1,363 64
Lalonde and Plantagenet .....	W. H. McKay.....	5	1	9 do (to Dec. 31, '90).....	18 75
do do .....	W. A. McKay.....	5	1	3 do from do .....	8 75
Lammermoor and Watson's Corners.....	W. R. Gibson.....	7	1	12 do .....	45 00
Lanark and Middleville.....	C. G. Jackson.....	7	6	12 do .....	170 00
Lanark and Perth.....	R. Hogan.....	12	6	12 do .....	64 00
Lanark and Watson's Corners.....	J. McFarlane.....	7	3	12 do .....	90 00
Lancaster and Martintown.....	D. McPherson.....	12	6	3 do (to June 30, '90).....	78 00
do do .....	J. Ross.....	12	6	9 do from do .....	217 50
Lancaster and South Lancaster.....	W. Gillespie.....	1	12	12 do .....	125 00
L'Annonciation and Nominique.....	V. Martineau.....	12	1	12 do .....	80 00
Lavant and Watson's Corners.....	A. Browning.....	13	2	12 do .....	100 00
Lenieux and South Casselman.....	A. Chesser.....	6½	3	6 do (to Sept. 30, '90).....	50 00
do do .....	D. McCormick.....	6½	3	6 do from do .....	50 00
Letter Kenny and Rockingham.....	J. Gallagher.....	6	1	12 do .....	46 00
Lime Bank and Manotick Station.....	F. Hardy.....	3½	3	12 do .....	60 00
Loch Garry, Maxville & Ry. Station.....	A. J. Kennedy.....	11 & ½	6	12 do .....	494 00
Loch Winnoch and Railway Station.....	R. Storie.....	1½	6	4 do (to July 31, '90).....	20 00
do do .....	do .....	1½	6	5 do (to Dec. 31, '90).....	77 08
do do .....	do .....	1½	3	3 do from do .....	22 50
L'Original and Calumet Station.....	J. Lee & C. Seguin.....	3	6	3 do (to June 30, '90).....	78 25
do do .....	J. Lee.....		6	9 do from do .....	234 75
Low and Maniwaki.....	W. Brooks.....	54	3	12 do .....	1,700 00
Low and North Wakefield.....	do .....	54 & 11	6	12 do .....	1,900 00
Luskville and Railway Station.....	F. Desbiens.....	2	6	12 do .....	50 00
McDonald's Corners and McLaren's Depot.....	S. Burns.....	11	6	12 do .....	239 00
Maberly and Railway Station.....	J. Morrow.....	1½	6	12 do .....	80 00
Mackie's Station and Ry. Station.....	J. Dunlap.....	¾	12	12 do .....	25 04
Malakoff and North Gower.....	A. Johnson.....	4	3	12 do .....	75 00
Maniwaki and Monteef.....	P. Paradis.....	15	1	12 do .....	95 00
Maniwaki and River Joseph.....	T. White.....	8	1	12 do .....	54 00
Maniwaki and St. Boniface.....	C. Gauthier.....	7	1	12 do .....	60 00
Manotick and Railway Station.....	T. McCorkhill.....	3½	6	12 do .....	62 60
Maryland and Railway Station.....	M. T. Bell.....	40 ft.	6 & 12	12 do .....	10 00
Masham Mills and Wakefield.....	P. Bertrand.....	7	1	12 do .....	50 00
Mattawa and Railway Station.....	E. J. Smith.....	1	12	12 do .....	133 32
Maxville and Railway Station.....	D. McArthur.....	½	18	12 do .....	75 00
Maxville and Riceville.....	W. H. Metcalfe.....	17½	6	12 do .....	447 00
Merrickville and Railway Station.....	M. Fitzgerald.....	½	12	12 do .....	85 00
do do (Irish Creek).....	D. Crozier.....	9	6	12 do .....	300 00
Metcalfe and Ottawa.....	R. L. Hornidge.....	21	6	12 do .....	495 00
Moncland and Strathmore.....	D. McIntosh.....	3	3	12 do .....	40 00
Montebello and Railway Station.....	F. X. Major.....	½	12	12 do .....	40 00
Montebello and St. Amédé.....	E. McCluskey.....	6	2	4 do 23 dys from Nov. 8, '90 .....	29 75

DETAIL of all payments for Mail Transportation in Ottawa Postal Division,  
&c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Montpellier and Ripon.....	L. Montpellier..	7	1	12 months.....	50 00
Moose Creek and Moulinette.....	T. D. Stark.....	20	6	3 do (to June 30, '90) ..	123 25
do do.....	S. Flanagan.....	20	6	9 do from do.....	371 25
Moose Creek and Railway Station..	T. Dorey.....	$\frac{1}{3}$	12	12 do.....	50 00
Morehead and Railway Station.....	W. Clarke.....	1	6	12 do.....	10 00
Morewood and Railway Station.....	J. Cochrane.....	18	6	12 do.....	398 00
Morrisburg and Waddington, U.S..	W. J. Murphy.....	3	6	12 do.....	50 00
Morrisburg and Winchester.....	J. S. Ross.....	17	6	12 do.....	450 00
Moulinette and Milleroches Station.	S. Forsyth.....	1	12	12 do.....	120 00
Mountain and Vancamp.....	R. Shaver.....	3	6	12 do.....	109 20
Mount Sherwood and Ottawa.....	A. Ardley.....	3	6	12 do.....	300 00
Mud Creek and Smith's Falls.....	W. Sheridan.....	6	2	9 do from July 1, '90..	60 00
New Edinburgh, Ottawa and Street Letter Boxes.....	J. W. Proctor.....	$1\frac{1}{2}$ & $\frac{3}{16}$	18	12 do.....	160 00
Nipissing Junction and Ry. Stations	M. H. Ritchie.....	$1\frac{1}{2}$ & $\frac{1}{16}$	12 & 6	12 do.....	125 04
North Augusta & Bellamy's Station	S. J. B. Whaley.....	$\frac{4}{3}$	6	6 do (to Sept. 30, '90) ..	100 00
do do.....	W. Pear.....	$\frac{4}{3}$	6	6 do from do.....	60 00
North Bay and Railway Station.....	W. McDonald.....	$\frac{1}{8}$	12 & 3	12 do.....	160 00
Northcote and Renfrew.....	J. Vaughan.....	14	2	12 do.....	130 00
North Gower and Osgoode Railway Station.....	A. Haggins.....	8	6	12 do.....	198 00
North Gower and Reeve Craig.....	T. Salter.....	3	1	12 do.....	25 00
North Nation Mills and Ry. Station	D. Landriau.....	$3\frac{1}{2}$	6	12 do.....	156 25
North Onslow and O'Connell.....	J. Murphy.....	7	2	12 do.....	80 00
North Onslow and Quyon.....	W. Richardson.....	7	3	12 do.....	100 00
North Valley and Osnaburck Centre	W. N. Dunbar.....	4	3	3 do (to June 30, '90) ..	15 00
do do.....	D. Alguire.....	4	3	3 do (to Sept. 30, '90) ..	37 50
do do.....	M. Dunbar.....	4	3	4 do (from Dec. 1, '90) ..	23 33
North Wakefield and Ottawa.....	R. Hastey.....	$26\frac{1}{2}$	6	3 do (to June 30, '90) ..	127 41
do do.....	do.....	26	6	9 do from do.....	375 00
North Williamsburg and Strader's Hill.....	W. C. Strader.....	5	1	12 do.....	26 00
Nosbonsing and Railway Station.....	M. Cahill.....	1	6	12 do.....	100 00
Notre Dame du Laus and St. Gerard de Montarville.....	B. Grenier.....	37	1	9 do (to Dec. 31, '90) ..	180 00
do do.....	P. Filiatrault.....	37	1	3 do from do.....	45 00
Oliver's Ferry and Railway Station	W. McCue.....	$5\frac{1}{4}$	6	12 do.....	240 00
Oliver's Ferry and Rideau Centre ..	A. Smith.....	$1\frac{1}{4}$	1	12 do.....	35 00
Orleans and Ottawa.....	H. Dupuis.....	$12\frac{1}{4}$	6	12 do.....	280 00
Osceola and Stafford.....	D. Childerhose.....	8	3	12 do.....	140 00
Osgoode Station and Ry. Station.....	J. Buckles.....	40 yds	6	12 do.....	15 00
Ottawa and Exhibition Grounds.....	W. Goodman.....			18 trips.....	13 50
Ottawa and Ottawa East.....	C. M. Garrow.....	$1\frac{1}{2}$	6	12 months.....	80 00
Ottawa and Post Office Department	E. Batterton.....	$\frac{1}{16}$	18	13 do (to June 30, '91) ..	625 60
Ottawa and Railway Stations.....	P. McKenna.....	$\frac{1}{16}$	13 as req.	13 do.....	3,785 04
Ottawa and Ramsay's Corners.....	R. Ramsay.....	$7\frac{1}{2}$	3	12 do.....	175 00
Ottawa and Richmond.....	H. Rielly.....	20	6	12 do.....	725 00
Ottawa and Wharf.....	P. McKenna.....	$\frac{3}{4}$	12	Season, 1890.....	62 00
Otter Lake and Shawville.....	C. R. Morrison.....	24	3	12 months.....	275 00
Otter Lake and Thornby.....	J. Hill.....	7	2	12 do.....	87 00
Oxford Station and Ry. Station.....	G. L. Cook.....	$\frac{1}{2}$	3	12 do.....	32 00
Pakenham and Panmure.....	G. McClinton.....	20	6	12 do.....	279 00
Pakenham and Railway Station.....	D. Shaw.....	$\frac{1}{4}$	18	12 do.....	187 80
Palmer Rapids and Rockingham.....	W. Mahon.....	8	1	12 do.....	50 00
Palmer Rapids and Wingle.....	J. Wingle.....	6	1	12 do.....	45 00
Papineauville and St. Amédé.....	R. Robinson.....	$7\frac{1}{2}$	2	7 do 7 days (to Nov. 7, '90).....	41 49
Pembroke and Railway Station.....	M. Belaire.....	$\frac{1}{4}$	24	12 do.....	400 00
Pendleton and Railway Station.....	H. Roy.....	16	7	12 do.....	500 00
Perreton and Govt. Road Crossing..	L. Matheson.....	4	6	6 do (from Oct. 1, '90) ..	61 13
Perth and Railway Station.....	J. Allan.....	$\frac{1}{2}$	29	12 do.....	272 25



DETAIL of all payments for Mail Transportation in Ottawa Postal Division,  
&c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Perth and Stanleyville.....	P. McParland ..	9½	4	12 months .....	170 00
Perth and Tennyson.....	W. Devlin.....	10	1	12 do .....	84 00
Petawawa and Railway Station.....	S. Devine .....	1½	3	12 do .....	90 00
Playfair and Perth.....	G. C. Mills.....	14	6	12 do .....	400 00
Point Alexander and Ry. Station.....	T. McAnulty.....	6	3	12 do .....	100 00
Pointe Gatineau and Quinnville.....	J. Gahagan.....	6½	1	3 do (from Jan. 1, '91)	10 00
Point Gatineau and Ry. Station.....	T. Gagnon .....	1½	12	12 do .....	120 00
Portage du Fort and Ry. Station.....	D. M. Rattray.....	7	18	12 do .....	312 00
Portage du Fort and Ross.....	D. McLaren.....	3	3	12 do .....	70 00
Port Coldwell and Railway Station.....	R. Jackson.....	50 feet	12	9 do (to Dec. 31, '90).	7 50
Prescott and Ogdensburg, U.S. ....	C. Plumb.....	2	18	12 do .....	578 24
Prescott and Railway Station.....	E. Leslie.....	½	18	12 do .....	140 85
Prescott and Street Letter Boxes.....	J. Dowsley.....	2	18	12 do .....	144 00
Prescott and Throoptown.....	P. Bulger.....	16	2	12 do .....	99 48
Quinnville and Templeton.....	J. Gahagan.....	6½	1	9 do (to Dec. 31, '90).	30 00
Quyon and Railway Station.....	W. Richardson..	1	6	12 do .....	75 00
Radford and Shawville.....	J. A. Armstrong	3	3	12 do .....	50 00
Rapides des Joachims and Mackie's Station.....	J. Dunlap.....	8	3	12 do .....	180 00
Rapides des Joachims and Rowanton	A. McDougall..	20	3	12 do .....	350 00
Renfrew and Ry. Station (C.P.R.) ..	D. Brownlee.....	¼	24	12 do .....	313 00
do do (K. & P.).....	J. Russell.....	¼	12	12 do .....	62 60
Richmond West and Stapledon.....	T. H. Stapledon	3½	3	12 do .....	40 00
Rigaud and St. Eugène.....	F. Jarry.....	9	6	1 do (from Mar. 1, '91)	32 50
Ripon and Thurso Railway Station.....	G. Dalaire.....	18	6	12 do .....	400 00
Rockland and Railway Station.....	A. Campbell.....	23	6	12 do .....	198 92
Rockliffe and Railway Station.....	W. H. McIntyre	300 yds	12	12 do .....	20 00
Rossport and Railway Station.....	J. J. Morrow.....	50 yds	12	12 do .....	15 00
Russell and Osgoode Ry. Station.....	P. Levie.....	2½	6	12 do .....	480 00
Russell and South Indian Ry. Station	R. Young.....	10	6	12 do .....	225 00
St. Eugène and Vankleek Hill.....	X. Proulx.....	10	6	12 do .....	290 00
Sand Point and Railway Station.....	E. De Renzy.....	1½	12	12 do .....	73 10
Shanrock and Whelan.....	S. Whelan.....	7	2	12 do .....	50 00
Shawville and Railway Station.....	W. McGuire.....	½	12	12 do .....	75 00
Sheedy and Ashdad Ry. Station.....	M. Sheedy.....	9½	3	12 do .....	150 00
Skye and Ry. Station (Greenfield) ..	H. McLean.....	8	6	12 do .....	245 00
Smith's Falls and Railway Station.....	H. Carley.....	½	36	12 do .....	400 00
Snake River and Railway Station.....	G. Douglas.....	3½	3	12 do .....	96 24
South Casselman and Ry. Station.....	J. St. Denis.....	1	6	6 do (to Sept. 30, '90).	12 50
do do.....	X. Denis.....	1	6	16 days (to Oct. 16, '90).	1 74
do do.....	A. Lalonde.....	1	6	5 months 15 dys from do	18 26
South Indian and Railway Station.....	J. K. Meredith..	½	12	12 do .....	50 00
South March and Railway Station.....	P. Orchard.....	15½	6	12 do .....	400 00
Spencerville and Railway Station.....	A. Carmichael..	1½	6	12 do .....	75 00
Stittsville and Railway Station.....	S. Mann.....	120 yds	6	12 do .....	21 91
Sturgeon Falls and Railway Station.....	J. Stillar.....	12	9	9 do (to Dec. 31, '90).	56 25
do do.....	J. Hewis.....	12	3	3 do from do .....	16 25
Sudbury and Railway Station.....	S. Fournier.....	12	12	12 do .....	93 90
The Brook and Railway Station (South Indian).....	A. Lefebvre.....	10	6	12 do .....	200 00
Toye's Hill and Winchester Springs.	J. B. McQuigg..	3	3	12 do .....	60 00
Vankleek Hill and Railway Station.....	W. Lawlor.....	12	6	12 do .....	626 00
Vars and Railway Crossing.....	S. T. Cheney.....	¼	12	9 do (to Dec. 31, '90).	22 50
do do.....	J. M. Bell.....	¼	12	3 do from do .....	7 50
Ventnor and Railway Station.....	E. J. Gilroy.....	5½	6	12 do .....	130 00
Verner and Railway Station.....	J. L. Michaud..	1	6	12 do .....	20 00
Vinton and Railway Station.....	W. Gilchrist.....	1	13	12 do .....	91 00
Wahnapiæ and Railway Station.....	D. McLaren.....	¼	12	12 do .....	54 39
Wales and Railway Station.....	P. Alguire.....	1	12	12 do .....	80 00
Waller and Harney's Crossing.....	W. Harney.....	1½	2	12 do .....	30 00
Warnock and Railway Station.....	J. Warnock.....	2	6	12 do .....	200 00

DETAIL of all payments for Mail Transportation in Ottawa Postal Division,  
&c.—*Concluded.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Warren and Railway Station.....	G. M. Warren..	100yds	12	12 months .....	80 00
Wemyss and Railway Station ....	R. Ritchie ...	$3\frac{1}{2}$	6	12 do .....	15 00
Wendover and Railway Station....	J. B. Malette, sr.	3	6	12 do .....	170 00
White River and Railway Station..	W. E. McLaughlin .....	$\frac{1}{2}$	12	12 do .....	30 00
Winchester and Osgoode Railway Station .....	A. Campbell...	22	6	12 do .....	625 00
Winchester and Railway Station...	A. Kendrick....	1	12	12 do .....	75 00
Wylie and Railway Station.....	J. Lyons.. . . .	2	3	12 do .....	73 62
				Total.....	\$62,502 66

WILLIAM WHITE,  
*Deputy Postmaster-General.*

W. H. SMITHSON,  
*Accountant.*

## PRINCE EDWARD ISLAND POSTAL DIVISION.

DETAIL of all payments for Mail Transportation in Prince Edward Island Postal Division, made within the Year ended 30th June, 1891.

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Albany and Tryon <i>via</i> North Tryon	C. Crawford ...	2 & 6 $\frac{1}{2}$	1 & 2	3 months (to June 30, '90)	25 00
Albany and Railway Station	H. Terrell ...	10 $\frac{1}{2}$	12	9 do from do	23 47
Albany and Victoria	G. Francis ...	10	6	9 do from do	161 25
Alberton and Kildare	R. Tuplin ...	10	2	12 do	60 00
Alberton and Lot 6	W. Hardy ...	6	2	12 do	50 00
Alberton and Railway Station	T. Keefe ...	10 $\frac{1}{2}$	12	12 do	60 00
Alma and Railway Station	J. Mountain ...	2	2	12 do	20 80
Appin Road and Bonshaw	J. Smith ...	4	1	6 do (to Sept. 30, '90).	11 24
do do	do	4	2	6 do from do	21 24
Argyle Shore and Bonshaw	A. Morrow ...	3	2	12 do	30 00
Armada and Railway Station	H. A. McPhee ...	10 $\frac{1}{2}$	3	12 do	20 00
Auburn and Pownal	W. J. Carver ...	10 $\frac{1}{2}$	2	10 do (from June 1, '90)	94 83
Augustine Cove and Lansdowne Hotel	D. Howatt ...	3	3	9 do (from July 1, '90).	57 75
Baldwin's Road and Perth Station	J. A. Moar ...	11 $\frac{1}{2}$	2	12 do	20 80
Bangor and Morell Station	J. McGregor ...	4	2	12 do	43 00
Bay Fortune and Souris East	J. McKie ...	10 $\frac{1}{2}$	3	12 do	132 00
Beach Point and Montague Bridge	J. Kennedy ...	22	3	12 do	346 00
Bear River and Clear Springs	C. McDonald ...	8	3	12 do	120 00
Bear River and Railway Station	D. Costello ...	1 $\frac{1}{4}$	3	12 do	15 60
Bedeque and Charlottetown	B. Toole ...	41	3	3 do (to June 30, '90).	193 50
Bedeque and Lansdowne Hotel	W. S. Newsom ...	8	3	9 do from do	78 75
Bedeque and Sea Cow Head	W. A. Noonan ...	4 $\frac{1}{2}$	2	12 do	46 80
Bedeque and Summerside	G. M. Price ...	11	3	3 do (to June 30, '90).	30 00
do do	P. DeLeod ...	9 $\frac{1}{2}$	6	9 do from do	191 25
Belfast and Charlottetown	G. O'Neill ...	24 $\frac{1}{2}$	6	12 do	950 00
Belfast and Garfield	A. A. Martin ...	3	2	12 do	30 00
Belfast and High Bank	E. W. Martin ...	22 $\frac{1}{2}$	3	12 do	397 32
Belfast and Point Prim	M. Martin ...	6 $\frac{1}{2}$	2	12 do	50 00
Bloomfield and Railway Station	J. O'Halloran ...	2	3	12 do	55 00
Bloomfield Station and Railway Station	F. Peters ...	1 $\frac{1}{4}$	6	12 do	25 00
Blooming Point and Tracadie Cross	J. B. McDonald ...	4 $\frac{1}{2}$	2	12 do	47 68
Bonshaw and Nine Mile Creek	N. H. McNevin ...	12	2	12 do	69 00
Bradalbane and New London	G. W. Bell ...	12	6	12 do	398 00
Bradalbane and Railway Station	M. Matheson ...	1 $\frac{1}{4}$	12	12 do	64 89
Brown's Creek and Whinn Road Cross	J. McDonald ...	1 $\frac{1}{2}$	3	12 do	26 00
Caledonia and Iris	A. Beaton ...	3	2	12 do	32 00
Caledonia and Orwell	J. N. McLeod ...	10 $\frac{1}{2}$	3	12 do	120 20
Caledonia and Rona	J. McLeod ...	4	2	12 do	32 00
Cape Egmont and Fifteen Point	L. D. Gallant ...	5	2	12 do	41 60
Cape Traverse Boat House and Railway Terminus	J. A. Strang ...	1 $\frac{1}{2}$	as req.	Special trips	55 20
Cape Traverse and Summerside	do	15	do	do	120 70
Cape Wolfe and Lot 4	J. J. Fish ...	6	2	12 months	62 00
Cardigan Bridge and Corraville	J. Sigsworth ...	6	2	12 do	52 00
Cardigan Bridge and Head of Cardigan	M. McAulay ...	4	2	12 do	41 60
Cardigan Bridge and Lot 56	J. McDonald ...	13 $\frac{1}{4}$	3	12 do	170 00
Cardigan Bridge and Mitchell River	H. McPhee ...	3	2	12 do	40 00
Cardigan Bridge and Railway Station	J. McVean ...	1 $\frac{1}{2}$	12	12 do	40 00
Cardigan Road and Railway Station	J. Smith ...	1 $\frac{1}{4}$	3	12 do	18 72
Cavendish and Hunter's River	J. Crew ...	31	3	12 do	148 00
Charlottetown and Railway Station	R. K. Brace ...	1 $\frac{1}{2}$	as req.	12 do	313 94
Charlottetown and Rocky Point	J. Smith ...	2 $\frac{1}{2}$	2	12 do	42 64
Charlottetown and Street Letter Boxes	R. K. Brace ...	2	18	12 do	117 37



DETAIL of all payments for Mail Transportation in Prince Edward Island  
Postal Division, &c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Charlottetown and Victoria.....	J. J. Vishey.....	211 <sup>3</sup> / <sub>4</sub>	3	9 months (from July 1, '90)	210 00
Cherry Valley and China Point....	D. McGillivray....	3 <sup>3</sup> / <sub>4</sub>	2	12 do	40 00
Clermont and Kensington.....	P. McKinnon.....	3	2	6 do (to Sept. 30, '90).	17 00
do do.....	A. Campbell.....	3	2	6 do from do	17 00
Clinton and New London.....	G. McKay.....	21 <sup>3</sup> / <sub>4</sub>	2	12 do	28 00
Clyde Station and Railway Station.	E. Crabbe.....	1 <sup>1</sup> / <sub>4</sub>	3	12 do	14 00
Coleman and Railway Station.....	A. McKinnon.....	1 <sup>1</sup> / <sub>4</sub>	6	12 do	30 00
Commercial Road and Peter's Road.	W. Johnston.....	2 <sup>1</sup> / <sub>4</sub>	2	12 do	30 00
Covehead Road and Grand Tracadie	T. Kelly.....	5	2	12 do	49 40
Darlington and Kelly's Cross.....	J. Keegan.....	11	3	12 do	115 00
Darlington and New Wiltshire.....	D. L. McLeod.....	1	2	4 do (to July 31, '90)..	5 66
Darlington and Princetown Road...	do.....	3	2	12 do	18 00
Darlington and Railway Station....	do.....	4 <sup>3</sup> / <sub>4</sub>	6	12 do	35 00
Darlington and Rose Valley.....	do.....	8	3	12 do	85 00
Darnley and Kensington.....	J. Glover.....	12	3	12 do	190 00
DeBlois Station and Railway Station	C. Perry.....	4 <sup>3</sup> / <sub>4</sub>	3	12 do	20 00
DeGros Marsh and Newport.....	M. McPhee.....	4 <sup>3</sup> / <sub>4</sub>	1	12 do	25 00
Dromore and Railway Station.....	J. McCabe.....	2	2	12 do	40 56
Dundas and Mount Hope.....	F. McDonald.....	6 <sup>1</sup> / <sub>2</sub>	2	10 do (from June 1, '90)	59 17
Dundas and Upton.....	do.....	3	2	2 do (to May 31, '90)..	6 33
East Baltic and Red Point.....	D. McEachern.....	4	2	12 do	30 00
East Point and Souris East.....	J. Kennedy.....	15	2	12 do	130 00
Ebenezer and Wheatley River.....	A. McCallum.....	2 <sup>1</sup> / <sub>2</sub>	2	12 do	32 00
Elliott's Mills and Railway Station.	R. Elliott.....	1 <sup>1</sup> / <sub>6</sub>	3	12 do	15 60
Elliotvale and Peake's Station.....	J. Edmonds.....	3 <sup>1</sup> / <sub>2</sub>	2	12 do	27 00
Elmira and South Lake.....	L. McDonald.....	2	2	12 do	23 92
Elmsdale and Railway Station.....	J. Adams.....	1 <sup>1</sup> / <sub>6</sub>	6	12 do	22 00
Emerald and Graham's Road.....	R. McDonald.....	7 <sup>1</sup> / <sub>6</sub>	3	12 do	100 00
Emerald and Kinkora.....	W. Clarke.....	16 r. t.	2	12 do	75 00
Emerald and Railway Station.....	P. A. Hughes.....	1 <sup>1</sup> / <sub>2</sub>	12	6 do (to Sept. 30, '90)	45 91
do do.....	F. P. Murphy.....	2	12	6 do from do	37 36
Farmington and Head of St. Peter's Bay	E. Power.....	5	2	12 do	50 00
Farmington and Mansfield.....	T. Boling.....	3 <sup>1</sup> / <sub>4</sub>	2	3 do (to June 30, '90).	6 50
do do.....	P. Gorman.....	3 <sup>1</sup> / <sub>2</sub>	2	9 do from do	16 50
Fifteen Point and Miscouche.....	J. N. DesRoches.....	9	2	12 do	67 00
Fitzgerald Station and Ry. Station.	J. Lawlor.....	1 <sup>1</sup> / <sub>6</sub>	3	12 do	5 00
Flat River and Selkirk Road.....	J. Callaghan.....	6 <sup>1</sup> / <sub>2</sub>	2	12 do	40 00
Forest Hill and Head of St. Peter's Bay	R. Matheson.....	4	2	12 do	48 00
Fortune Cove and O'Leary Station.	T. E. Hogan.....	7	1	12 do	32 48
Fredericton and Railway Station...	J. Weeks.....	1 <sup>1</sup> / <sub>6</sub>	3	12 do	18 00
Freetown and Lower Freetown.....	T. Taylor.....	2 <sup>1</sup> / <sub>6</sub>	2	7 do (to Oct. 31, '90)	16 92
do do.....	do.....	2 <sup>1</sup> / <sub>6</sub>	3	5 do from do	18 53
Freetown and Railway Station.....	R. B. Auld.....	1 <sup>1</sup> / <sub>2</sub>	6	12 do	46 93
French Village and Mount Stewart.	C. McIntyre.....	5	2	12 do	64 00
Georgetown and Murray Harbour North.	R. Thornton.....	30	3	12 do	265 00
Georgetown and Newport.....	P. McIntyre.....	2 <sup>1</sup> / <sub>4</sub>	3	12 do	68 00
Georgetown and Railway Station...	R. R. Jenkins.....	1 <sup>1</sup> / <sub>2</sub>	12	12 do	107 91
Georgetown and Steamer "Stanley"	do.....	3	as req.	Special trips	8 20
Glencorrodale and Priest Pond.....	J. McPhee.....	3 <sup>1</sup> / <sub>4</sub>	2	12 months	23 92
Glengarry and Railway Station.....	P. Griffin.....	5 <sup>1</sup> / <sub>2</sub>	1	12 do	25 00
Glen William and Murray River...	J. Martin.....	3 <sup>1</sup> / <sub>2</sub>	2	12 do	33 28
Gowan Brae and Souris East.....	J. E. Manning.....	3	3	3 do (to June 30, '90).	7 54
do do.....	J. Mallard.....	3	2	9 do from do	22 50
Greenwich and Head of St. Peter's Bay	F. McEwen.....	3 <sup>1</sup> / <sub>4</sub>	2	3 do (to June 30, '90).	7 50
do do.....	A. B. Hyndman.....	3 <sup>1</sup> / <sub>2</sub>	2	9 do from do	30 00

DETAIL of all payments for Mail Transportation in Prince Edward Island  
Postal Division, &c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Harrington and Winsloe Road....	R. Lawson.....	1 $\frac{1}{2}$	2	12 months .....	32 00
Hazel Green and Peake's Station...	H. R. Mooney..	6	2	12 do .....	57 48
Head of Hillsboro' and Mount Stewart.....	D. D. Coffin....	4 $\frac{1}{2}$	2	12 do .....	46 80
Head of St. Peter's Bay and Monticello .....	J. McInnis.....	8 $\frac{1}{2}$	2	12 do .....	61 00
Head of St. Peter's Bay and Railway Station.....	A. McAulay ..	$\frac{1}{4}$	12	12 do .....	100 00
Higgins Road and Wellington Station .....	D. McNeill.....	13	3	12 do .....	156 00
Hopefield and Murray River.....	A. McPhee.....	4	2	12 do .....	40 00
Hunter's River and North Rustico..	J. Crew .....	16	3	12 do .....	146 00
Hunter's River and Ry. Station....	P. McGrath.....	1 $\frac{1}{16}$	12	12 do .....	65 07
Inverness and Railway Station.....	P. J. Kilbride...	2 $\frac{1}{2}$	2	12 do .....	51 25
Johnston's River and Southport....	W. J. Brazil....	12 $\frac{1}{4}$	2	12 do .....	75 00
Kensington and Park Corner.....	H. McLeod.....	16 $\frac{1}{8}$	3	12 do .....	164 00
Kensington and Railway Station...	G. Glover.....	$\frac{1}{8}$	12	12 do .....	65 07
Kildare Capes and Tignish.....	J. DesRoches...	4	2	12 do .....	41 60
Kildare Station and Railway Station	H. Gaudet.....	1 $\frac{1}{2}$	2	12 do .....	12 48
Kinkora and Railway Station.....	J. Farmer.....	$\frac{1}{4}$	12	12 do .....	43 68
Kinross and Lyndale .....	A. Lamont.....	3	1	12 do .....	24 00
Kinross and Orwell .....	J. Murchison...	1	3	12 do .....	55 00
Lansdowne Hotel and Ry. Station..	J. A. Strang....	1 $\frac{1}{16}$	6	12 do .....	5 00
Launching and Newport.....	A. Morrison.....	8	2	12 do .....	65 00
Little Tignish and Tignish.....	J. J. Buote.....	4	2	12 do .....	25 00
Little York and Marshfield.....	R. Lawson.....	1 $\frac{1}{2}$	2	12 do .....	35 00
Little York and Railway Station...	T. H. Lawson....	1 $\frac{1}{16}$	12	12 do .....	62 40
Little York and Union Road.....	R. Lawson.....	24	3	12 do .....	212 00
Lot 4 and Miminegash.....	J. Doyle.....	5	2	12 do .....	67 60
Lot 4 and Railway Station.....	J. M. O'Halloran	4	6	12 do .....	124 80
Lot 10 and Railway Station.....	H. Ritchie.....	1 $\frac{1}{2}$	2	12 do .....	26 00
Lot 11 and Railway Station.....	T. Bulger.....	5 $\frac{1}{4}$	3	12 do .....	58 00
Lot 12 and Railway Station.....	R. Hayes.....	2	12	12 do .....	87 64
Lot 14 and Railway Station.....	G. Smith.....	5	3	12 do .....	63 96
Lot 35 and Railway Station.....	M. Lawler.....	1 $\frac{1}{2}$	2	12 do .....	33 28
Lot 40 and Railway Station.....	A. H. McEwen..	1	6	12 do .....	48 48
Lot 56 and Sailor's Hope.....	F. McDonald....	5 $\frac{1}{2}$	2	12 do .....	45 00
Marie Bridge and Milburn.....	P. Long.....	3 $\frac{1}{2}$	3	3 do (to June 30, '90) ..	5 00
do do .....	T. Mullin.....	3 $\frac{1}{2}$	2	9 do from do .....	18 36
Marie Bridge and Morel Road .....	A. Webster.....	1	3	12 do .....	15 00
Midgell and Morel Station.....	P. Long.....	5	3	12 do .....	45 00
Mill Cove and Railway Station....	B. Hughes.....	2	2	12 do .....	20 00
Mill River and Railway Station....	F. Peters.....	$\frac{1}{2}$	2	12 do .....	15 00
Mill View and Vernon River Bridge	F. Storey.....	2	6	12 do .....	76 00
Milton Station and North Milton ..	W. McNeill....	2	2	12 do .....	26 00
Milton Station and Railway Station	do .....	$\frac{1}{8}$	3	12 do .....	31 00
Miscouche and Railway Station...	J. N. DesRoches	$\frac{1}{8}$	12	12 do .....	36 00
Miscouche and South West Lot 16..	S. McNeill.....	9 $\frac{1}{2}$	2	12 do .....	76 00
Monaghan and Pownal .....	W. J. Carver...	8 $\frac{1}{2}$	2	2 do (to May 31, '90) ..	15 00
Montague Bridge and Ry. Station..	J. McNeill.....	5 $\frac{1}{2}$	6	12 do .....	325 00
Montague Bridge and Valleyfield..	W. McLeod.....	5	3	12 do .....	93 73
Montague Bridge and Victoria Cross	J. Dewar.....	3	3	12 do .....	57 00
Montague Cross and Murray Harbour Road .....	J. McLean.....	2 $\frac{1}{2}$	3	12 do .....	26 40
Morell Rear and Morell Station....	R. D. Sterns....	4 $\frac{1}{2}$	2	12 do .....	37 00
Morell Station and Railway Station	M. Coffin.....	1 $\frac{1}{4}$	12	12 do .....	15 60
Mount Herbert and Southport.....	R. Wood.....	6 $\frac{1}{2}$	2	12 do .....	50 00
Mount Pleasant and Railway Station	H. N. Robinson.	3 $\frac{1}{2}$	2	12 do .....	41 60
Mount Stewart and Railway Station	H. McEachern..	$\frac{1}{4}$	12	12 do .....	20 00

DETAIL of all payments for Mail Transportation in Prince Edward Island  
Postal Division, &c.—*Concluded.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Murray Harbour South and White Sands.....	H. J. Brehaut ..	3	2	12 months .....	46 00
New Acadia and Railway Station..	P. Gallant.....	$\frac{1}{4}$	2	12 do .....	10 00
New Haven and Riverdale.....	D. McFadyen...	$\frac{3}{4}$	2	12 do .....	36 00
Newton Cross and Orwell.....	D. Cody.....	$\frac{2}{3}$	2	12 do .....	32 48
New Wiltshire and Railway Station..	C. Easter.....	$\frac{2}{3}$	6	8 do (from Aug. 1, '90)	11 33
New Zealand and Railway Station...	J. Cantwell.....	$\frac{1}{3}$	3	12 do .....	15 60
Northam and Railway Station.....	H. J. Folland....	$\frac{1}{3}$	6	12 do .....	20 00
North Lake and Souris East.....	W. McLaren.....	$\frac{2}{3}$	3	12 do .....	213 00
North River and South Wiltshire...	T. Yeo.....	4	3	12 do .....	50 00
O'Leary Station and Ry. Station...	R. Ellis.....	$\frac{1}{6}$	6	12 do .....	15 64
O'Leary Station and West Cape....	W. Ellis.....	$\frac{9}{6}$	2	12 do .....	83 48
Orwell and Orwell Cove.....	D. E. Clarke....	2	3	12 do .....	49 00
Palmer Road and Railway Station..	W. Kinch .....	3	2	12 do .....	35 00
Palmer Road and Waterford.....	do .....	4	2	12 do .....	20 00
Peakes Station and Railway Station	J. F. McDonald...	$\frac{1}{10}$	3	12 do .....	15 60
Pisquid and Railway Station.....	A. McDonald....	$\frac{1}{3}$	2	12 do .....	33 28
Pisquid and Webster's Corner.....	P. McNally.....	6	3	12 do .....	52 00
Pisquid Road and Vernon River....	E. O'Keeffe.....	3	2	12 do .....	46 00
Piusville and Railway Station.....	A. Wedge.....	2	2	12 do .....	26 00
Port Hill and Railway Station.....	L. Yeo.....	4	12	12 do .....	187 80
St. Andrews and Railway Station..	J. McDonald....	$\frac{1}{3}$	3	12 do .....	25 00
St. Eleanors and Summerside .....	H. Mills.....	$\frac{2}{3}$	6	12 do .....	74 00
Scotchfort and Railway Station.....	J. McDonald....	$\frac{1}{4}$	2	12 do .....	12 48
Sea Cow Pond and Tignish.....	T. Bernard.....	$\frac{7}{2}$	2	12 do .....	50 00
Skinner's Pond and Tignish.....	P. Aylward.....	16	2	12 do .....	58 00
Souris East and Railway Station...	L. Cheverie.....	$\frac{1}{2}$	12	12 do .....	75 45
Suffolk Station and Railway Station	J. A. Ferguson...	$\frac{1}{10}$	2	12 do .....	20 80
Summerside and Railway Station...	R. Glover.....	$\frac{1}{2}$	as req.	12 do .....	150 88
Summerside and Street Letter Boxes	do .....	$\frac{1}{10}$	14	12 do .....	25 00
Summerville and Vernon River....	E. Fraser.....	$\frac{1}{2}$	3	12 do .....	54 00
Ten Mile House and Ry. Station...	J. Fitzpatrick ..	$\frac{1}{4}$	2	12 do .....	20 00
Tignish and Railway Station.....	D. Villard .....	$\frac{1}{4}$	12	9 do (to Dec. 31, '90)..	30 00
do do .....	F. Gallant.....	$\frac{1}{4}$	12	3 do from do ..	10 00
Tracadie Cross and Railway Station	A. Johnston....	$\frac{1}{2}$	3	12 do .....	28 08
Traveller's Rest and Ry. Station...	T. Townsend....	1	3	12 do .....	39 00
Wellington and Wellington Station.	J. A. Arsenault..	$\frac{1}{3}$	2	12 do .....	21 48
Wellington Station and Ry. Station	F. J. Arsenault..	$\frac{1}{10}$	12	12 do .....	20 00
Western Road and Railway Station	P. Reid .....	$\frac{1}{2}$	2	12 do .....	25 00
West Point and Railway Station...	P. McPhee.....	13	2	12 do .....	104 00
West St. Peters and Railway Station	J. McDonald....	$\frac{2}{3}$	2	12 do .....	40 00
Winlot Valley and Railway Station..	W. B. Bowness..	$\frac{4}{5}$	2	12 do .....	66 85
Winsloe Station and Ry. Station...	J. Burrows.....	$\frac{1}{16}$	3	12 do .....	15 00
Wood Islands and Wood Islands North	D. Crawford....	$\frac{2}{2}$	3	12 do .....	45 00
Special trips; snow blockade on railway.....					14 00
				Total.....	\$13,279 27

WILLIAM WHITE,  
*Deputy Postmaster-General.*

W. H. SMITHSON,  
*Accountant.*



## QUEBEC POSTAL DIVISION.

DETAIL of all payments for Mail Transportation in Quebec Postal Division,  
made within the year ended 30th June, 1891.

Name of Route.	Name of Contractor.	Distances in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Adderley and St. Pierre Baptiste...	P. A. Drolet	3	3	12 months	60 00
Adstock and Robertson Station	R. Bolduc	9	2	12 do	105 00
Agnes and Nadeau's Crossing	P. Roy	4½	1	12 do	25 00
Agnes and Three Lakes	H. W. Albro	10	1	12 do	49 00
Allard Settlement and Nouvelle	J. Keays, jun.	3	1	12 do	20 00
Anqui and Railway Station	T. Ross	60 yds	12	12 do	48 00
Ancienne Lorette and Champigny	N. Alain	2	6	12 do	60 00
Armagh and St. Raphael	T. Roy	15	3	12 do	130 00
Aubert Gallion & St. George Beauce	W. M. Pozer	2	6	3 do (to June 30, '90)	8 75
do do	M. G. Pozer	4	6	9 do from do	26 25
Avignon and Metapedia	L. Blaquiere	7	6	12 do	164 00
Bagotville and Chicoutimi	E. Leveque	10	as req.	Season 1890	12 00
Bagotville and Grande Baie	J. Savard	3	do	do	33 00
Bagotville and L'Anse St. Jean	R. Gagnon	58	2	24 trips	60 00
Bagotville and Wharf	E. Leveque	3	as req.	Season 1890	20 00
Baillargeon and Railway Station	B. Huot	3	3	12 months	40 00
Barachois de Malbaie and Wharf	T. S. Vardon	4	as req.	Season 1890	74 10
Barriere St. Valier and St. Sauveur de Quebec	E. Emond	1	12	8 months (from Aug. 1, '90)	26 67
Beauce Junction and Saints Angles	C. Drouin	8	3	9 do (to Dec. 31, '90)	90 00
Beauce Junction and Jersey Mills	A. Lessard	26½	6	12 do	678 00
Beauce Junction & Railway Station	V. Bilodeau	60 yds	12	12 do	25 00
Beauce Junction and St. Angles	C. Drouin	8	3	3 do (from Jan. 1, '91)	30 00
Beaudet and Railway Station	F. Petitclerc	½	6	12 do	20 00
Beaupre and St. Fereol	F. Michel	7	3	12 do	100 00
Bennett and Maple Grove	J. Bennett	3	3	12 do	50 00
Bergerville and Quebec	J. Drolet	3	6	12 do	90 00
Bersimis and Moisie	R. H. Montgomery	280		Season 1890-91	715 00
Bersimis and Pointe du Paradis	do			Special trip	38 00
Bersimis and Sault au Cochon	S. Miller	26	2	3 months (to June 30, '90)	137 50
do do	J. & E. Miller	26	2	6 do (to Dec. 31, '90)	275 00
do do	E. Miller	26	2	3 do from do	137 50
Berthier and Railway Station	V. Guilmet	2½	12	12 do	78 00
Bic and Railway Station	J. R. Colclough	10 yds	12	12 do	34 20
Bic and St. Valerien de Rimouski	J. Moisan	3½	6	12 do	100 00
Bishop's Crossing and East Dudswell	H. R. Bishop	3	3	12 do	40 00
Black Cape and Quarry	A. Quarry	4½	3	12 do	60 00
Blanchet and St. Lambert	J. Paquet	3	12	12 do	35 00
Bonaventure Island and Percé	P. Bossey	3	3	12 do	00 00
Bourg Louis and Railway Station	P. Russell	3	6	12 do	75 00
Broughton Station & East Broughton	L. Beaudin	5½	6	12 do	150 00
Broughton Station and Railway Station	J. McGee	50 yds	12	12 do	24 00
Broughton Station and West Broughton	M. Rousseau	6½	6	12 do	140 00
Buckland and St. Lazare	L. Kemner	15	3	12 do	195 00
Buckland and St. Magloire	P. Tanguay	18	3	12 do	177 00
Cacouna and Railway Station	J. B. Beaulieu	5	12	12 do	250 00
do do (Express)	do	2½	6 & 12	12 do	70 22
Campbellton and Paspébiac	A. Cyr	88	6	12 do	4,001 00
Cap à L'Aigle and Murray Bay	P. Savard	3	as req.	Season 1890	61 50
Cape Cove and Wharf	E. Bourget	½	do	do	57 00
Cap Rouge and Quebec	J. Drolet	9	6	12 months	199 00
Cap St. Ignace and Railway Station	H. C. LaRue	1½	12	12 do	90 00
Cap Santé and Les Escureuils	O. Gauvreau	4½	6	12 do	218 00
Cap Santé and Portneuf	E. Marcotte	5	6	12 do	150 00

DETAIL of all payments for Mail Transportation in Quebec Postal Division,  
&c.—Continued.

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Casault and Railway Station. . .	J. Ouellet . . .	2	3	12 months . . . . .	40 00
Castlebar and Danville . . . . .	J. Jarvis . . .	5	6	12 do . . . . .	150 00
Castor and Hamilton Cove . . . . .	L. E. Aubé . . .	3½	3	6 do (to Sept. 30, '90). . .	35 00
Causapsal and Railway Station . . .	R. A. Blais . . .	250 yds	12	12 do . . . . .	50 00
Cedar Hall and Railway Station . . .	J. Smith . . .	60 yds	6	12 do . . . . .	12 00
Chambord and Metabechouan . . . .	C. Gagnon . . .	9	6	12 do . . . . .	350 00
Chambord and Railway Station . . . .	J. Bilodeau . . .	1	12	12 do . . . . .	125 20
Champigny and Railway Station . . .	H. Robitaille . .	1	12	12 do . . . . .	80 00
Channay and Piopolis . . . . .	P. B. Keens . . .	9	1	6 do (to Sept. 30, '90). . .	30 00
do do . . . . .	F. Paulin . . .	9	1	6 do from do . . . . .	30 00
Charlesbourg & Charlesbourg West.	E. Lefebvre . . .	2½	2	12 do . . . . .	25 00
Charlesbourg and Quebec . . . . .	do . . . . .	5	2	12 do . . . . .	125 00
Chaudière Curve & Railway Station .	A. Lemieux . . .	30 yds	12	4 do (to July 31, '90). . .	6 66
do do . . . . .	E. Fontaine . . .	30 yds	12	8 do from do . . . . .	26 66
Chaudière Mills and Railway Station .	A. Lemieux . . .	3½	6	3 do (to June 30, '90). . .	25 00
do do . . . . .	G. Breakey . . .	3½	6	9 do from do . . . . .	75 00
Chaudière Station and Railway Station . . . . .	A. McTeer . . .	300 yds	6	9 do (to Dec. 31, '90). . .	26 25
do do . . . . .	A. McTeer, jun. .	300 yds	6	3 do from do . . . . .	8 75
Chemin Taché and St. Cyprien . . . .	G. Dallaire . . .	6	1	6 do (to Sept. 30, '90). . .	17 50
Chemin Taché and St. François-Xavier de Viger . . . . .	F. April . . . .	6	2	12 do . . . . .	80 00
Chicoutimi and Grande Baie . . . . .	U. Gobeil . . .	13	6	9 do (to Dec. 31, '90). . .	234 00
do do . . . . .	M. Tremblay . . .	13	6	3 do from do . . . . .	70 00
Chicoutimi and Hebertville . . . . .	J. B. Bouchard . .	40	6	12 do . . . . .	875 00
Chicoutimi and Laterrière . . . . .	D. Simard . . .	10	6	12 do . . . . .	284 96
Chicoutimi and Tremblay . . . . .	N. Laforge . . .	2	6	12 do . . . . .	80 00
Chicoutimi and Wharf . . . . .	A. Guimond . . .	½	as req.	Season 1890. . . . .	33 00
Clairvaux and St. Cassien des Caps .	J. Guay . . . .	6	3	2 months (from Feb. 1, '91). . . . .	10 00
Clairvaux and St. Paul's Bay . . . . .	E. Gauthier . . .	7½	2	10 do (to Jan. 31, '91). . .	60 00
Clapham and Inverness . . . . .	J. Forbes . . .	13½	3	12 do . . . . .	156 00
Coleraine Station & Railway Station .	J. Roberge . . .	67 yds	12	12 do . . . . .	40 00
Coleraine Station and Sanborn . . . .	F. Hagerty . . .	14	3	6 do (to Sept. 30, '90). . .	98 00
do do . . . . .	P. Devlin . . .	14	3	6 do from do . . . . .	87 00
Coleraine Station and Wolfestown . .	N. Roy . . . .	9	3	6 do (to Sept. 30, '90).. .	64 00
do do . . . . .	M. Bilodeau . . .	9	3	6 do from do . . . . .	44 50
Craig's Road Station and Frechette.	N. Frechette . . .	2½	3	6 do (to Sept. 30, '90).. .	25 00
Craig's Road Station and Railway Station . . . . .	N. Fournier . . .	10 yds	12	12 do . . . . .	20 00
Cranbourne and Culdaff . . . . .	W. Wilson . . .	5	3	12 do . . . . .	67 48
Cranbourne and Frampton . . . . .	V. Lacroix . . .	8	3	12 do . . . . .	120 00
Cross Point and Ste. Anne de Restigouche . . . . .	C. Guay . . . .	2	6	12 do . . . . .	100 00
Cross Point and Sellarville . . . . .	J. Hume . . . .	10½	2	12 do . . . . .	76 00
Cumberland Mills and River Gilbert	T. J. Taylor . . .	8	1	12 do . . . . .	50 00
Dablon and Railway Station . . . . .	G. Larouche . . .	1½	3	12 do . . . . .	25 00
Danville and Railway Station . . . .	T. B. Curtus . . .	10½	5	12 do . . . . .	38 00
Danville and St. Camille . . . . .	U. Painchaud . . .	17	3	9 do (to Dec. 31, '90).. .	187 50
do do . . . . .	U. Naur . . . .	17	3	3 do from do . . . . .	61 25
Danville and St. George de Windsor	J. Godbout . . .	10	3	12 do . . . . .	120 00
Danville and South Ham . . . . .	L. A. Turcotte . .	24	3	12 do . . . . .	370 00
Delisle and St. Joseph d'Alma . . . .	T. Maltais . . .	8	2	12 do . . . . .	104 00
Denison's Mills and Richmond East.	J. R. Denison . . .	7	2	12 do . . . . .	125 00
Dequen and Railway Station . . . . .	O. Couture . . .	2	3	12 do . . . . .	50 00
Deschambault and Railway Station .	O. Perreault . . .	2½	12	12 do . . . . .	99 00
Desjardins and Railway Station . . .	A. Blondeau . . .	100 yds	12	12 do . . . . .	20 00
D'Israeli and Railway Station . . . .	J. E. Rheault . . .	120 yds	12	12 do . . . . .	32 00
Douglastown and Wharf . . . . .	C. Kennedy . . .	1	as req.	Season 1890. . . . .	57 50
Dudswell Centre and Ry. Station . .	C. Lothrop . . .	2½	12	12 months . . . . .	200 00
East Angus and South Dudswell . . .	E. F. Orr . . . .	4½	3	12 do . . . . .	60 00
East Magdala and Lyster . . . . .	A. Rousseau . . .	4	1	12 do . . . . .	26 00

DETAIL of all payments for Mail Transportation in Quebec Postal Division,  
&c.—Continued.

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Edmunston and Rivière du Loup...	J. Turner. ....	79	6	12 months .....	3,999 00
Elgin Road and Railway Station...	F. Belanger. ....	1	3	12 do .....	40 00
Escominac and Fleurant .....	J. Doherty .....	8	1	12 do .....	37 00
Esquimaux Point and Lourdes du Blanc Sablon.....	J. V. LeGresley. ....	420	3	.....	350 00
Esquimaux Point and Moisie. ....	C. Ahier. ....	125	.....	Season 1890-91. ....	420 00
Etchemin and Lévis .....	F. Joncas. ....	6	12	12 months .....	400 00
Etchemin and St. Jean Chrysostome ..	A. Pichet. ....	3	6	12 do .....	112 00
Etchemin and St. Nicholas. ....	M. Carrier. ....	9	6	12 do .....	375 00
Etchemin and South Quebec. ....	P. E. Bourassa. ....	4	6	12 do .....	100 00
Father Point and Railway Station. ....	J. Heppel .....	2	12	12 do .....	119 00
Fleurian and Ste. Luce Station. ....	A. Caron .....	18	3	12 do .....	180 00
Fontenelle and Gaspé Basin.....	J. Stanley .....	8	1	12 do .....	32 00
Fortin and Matane. ....	N. Fortin. ....	6	1	12 do .....	30 00
Fox River and Grande Grève .....	E. Tapp. ....	20	3	12 do .....	285 00
Fox River and Petit Madeleine .....	J. B. Jalbert .....	51	2	9 do (from July 1, '90) ..	455 70
Fox River and Ste. Anne des Monts. ....	J. Philibert. ....	107	2	3 do (to June 30, '90)..	274 52
Frampton and Ste. Henedine .....	J. Audette .....	13	6	12 do .....	250 00
Frampton and Springbrook .....	J. Clark. ....	4	3	12 do .....	60 00
Frechette and St. Nicholas. ....	M. Demers. ....	5	3	6 do (from Oct. 1, '90). ..	39 00
French Village and Richmond East. ....	Z. Houle .....	15	6	12 do .....	300 00
Garthby Station and Ry. Station. ....	T. Jacques. ....	31 <sup>1</sup> / <sub>2</sub>	12	12 do .....	73 32
Gaspé Basin and Gaspé Bay, South. ....	J. H. Eden .....	4 <sup>1</sup> / <sub>2</sub>	3	12 do .....	60 00
Gaspé Basin and Grande Grève .....	A. G. Annett. ....	15	3	12 do .....	230 00
Gaspé Basin and Paspebiac .....	W. P. Ramier .....	103	6	9 do (from July 1, '90) ..	3,750 00
Gaspé Basin and Percé .....	D. Grant .....	36	6	3 do (to June 30, '90; less fine). ....	473 75
Gaspé Basin and Wharf .....	J. Davis. ....	1	as req.	Season 1890. ....	55 50
Grande Baie and L'Anse St. Jean. ....	R. Gagnon. ....	54	2	12 months .....	230 00
Grande Baie and St. Urbain. ....	A. Fortin. ....	63	3	12 do .....	533 00
Grande Cascapedia and New Richmond .....	W. Robertson ..	41 <sup>1</sup> / <sub>2</sub>	2	12 do .....	80 00
Grandes Coudres and Jersey Mills. ....	M. Cahill .....	14	3	12 do .....	180 00
Grand Metis and Metis Point .....	W. E. Page. ....	6	6	3 do (to Sept. 15, '90)..	59 25
Grand Metis and Railway Station. ....	do .....	3	12	12 do .....	187 50
Grand Pabos and Ste. Adelaide de Pabos. ....	T. Soucy .....	4	as req.	Season 1890. ....	57 00
Grand River and Wharf. ....	T. A. Boudin. ....	4	do	do .....	57 00
Green River and St. Antonin .....	C. April. ....	3 <sup>1</sup> / <sub>2</sub>	6	12 months .....	60 00
Green River and St. Modeste .....	C. Chouinard. ....	5	6	12 do .....	115 00
Greenshields and St. Cyr .....	R. E. Dyson. ....	4 <sup>1</sup> / <sub>2</sub>	1	12 do .....	25 00
Gronelines and Railway Station .....	L. Côté. ....	3 <sup>1</sup> / <sub>2</sub>	12	12 do .....	204 00
Harvey Hill Mines and West Broughton .....	J. MGee. ....	3	6	6 do (to Sept. 30, '90)..	40 00
do do .....	A. McCallum. ....	3	6	6 do from do ..	40 00
Hebertville and Metabechouan .....	E. Girard. ....	12	6	12 do .....	390 00
Hebertville and St. Joseph d'Alma. ....	C. Hebert .....	12	6	12 do .....	400 00
Hedleyville and St. Roch de Québec ..	J. DeBlois .....	12	12	12 do .....	62 60
Hemison and St. Malachie. ....	T. Smith, jun. ....	3	1	12 do .....	25 00
Inverness and Kinnear's Mills. ....	J. Quan. ....	9 <sup>1</sup> / <sub>2</sub>	3	12 do .....	115 00
Inverness and Leeds. ....	J. McKeage. ....	12	6	12 do .....	355 00
Inverness and New Ireland. ....	J. Jamieson. ....	17	3	9 do (to Dec. 31, '90)..	133 50
do do .....	J. Neagle. ....	17	7	3 do from do ..	42 50
Inverness and Ste. Julie Station. ....	W. Johnston. ....	11	7	12 do .....	312 00
Isle aux Coudres and St. Paul's Bay ..	J. Dufour. ....	9	2	12 do .....	334 17
Isle aux Coudres and Wharf. ....	E. Dufour. ....	6	2	Season 1890. ....	46 50
Isle aux Grues and Montmagny. ....	N. LeBel. ....	6	2	12 months .....	250 00
Isle Verte and Notre Dame de L'Isle Verte. ....	P. T. Fraser. ....	6	1	12 do .....	80 00
Isle Verte and Railway Station. ....	L. A. Bertrand. ....	1	12	12 do .....	80 00
Isle Verte and St. Paul de la Croix. ....	A. Boucher. ....	10	2	12 do .....	102 00



DETAIL of all payments for Mail Transportation in Quebec Postal Division,  
&c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Jersey Mills and Marlow.....	M. Cahill.....	13	3	12 months.....	230 00
Kamouraska and Railway Station..	J. B. Pelletier..	5	24	12 do.....	375 00
Kingsey Falls and Lorne.....	M. Morin.....	4	12	12 do.....	230 00
Kingsey Falls and Robson.....	H. Gagnon.....	7	2	12 do.....	60 00
Kinnear's Mills and Leeds.....	J. McCutcheon..	9	3	12 do.....	160 00
Kiskisink and Railway Station.....	J. Bernier.....	$\frac{1}{4}$	6	12 do.....	20 00
La Beauce and Railway Station.....	J. B. Grégoire..	$\frac{1}{3}$	12	12 do.....	50 00
La Beauce and St. Elzéar.....	F. Guay.....	3	6	12 do.....	92 00
Lac Edouard and Railway Station..	D. F. Johnson..	15 yds	12	12 do.....	20 00
Lachevrotière and Railway Station..	V. Portelance..	$\frac{1}{2}$	6	12 do.....	12 00
Lac St. Joseph and Railway Station	R. Sissons.....	$\frac{1}{7}$	12	12 do.....	24 00
La Décharge and Tremblay.....	B. Bouchard.....	21	1	12 do.....	75 00
Lake Aylmer and Lake Weedon.....	L. A. Boisvert..	12	6	12 do.....	139 75
Lake Beauport and Quebec.....	P. Brown.....	13	2	12 do.....	150 00
Lake Etchemin and Langevin.....	L. Mercier.....	12	6	12 do.....	290 00
Lake Etchemin and Ste. Rose de Watford.....	A. Chabot.....	12	1	12 do.....	50 00
Lake Etchemin and Standon.....	J. Fortin.....	12	6	12 do.....	270 00
Lake Weedon and Railway Station..	F. Brère.....	60 yds	6	3 do (to June 30, '90)..	6 00
do do	J. Beaupré.....	60 yds	12	9 do from do.....	56 25
Lamartine and Railway Station.....	P. Cloutier.....	3	4	12 do.....	50 00
Lambton and Railway Station.....	C. Fortier.....	14	6	12 do.....	350 00
Lambton and Valletort.....	N. Boutin.....	8	6	12 do.....	194 48
Landvilla and Railway Station.....	C. Lavallée.....	2	6	12 do.....	48 00
L'Anse à Giles and Railway Station	J. F. Giasson.....	2	6	12 do.....	80 00
L'Anse au Foïn and Tremblay.....	F. Tremblay.....	8	4	12 do.....	156 00
La Petite Rivière Quebec and Railway Station.....	C. R. Roy.....	6	6	12 do.....	35 00
La Petite Rivière St. François Xavier, and St. Cassien des Caps.	P. Bouchard.....	7	6	12 do.....	220 00
Lauzon and Lévis.....	J. B. Carrier.....	2	12	12 do.....	95 00
Lauzon and St. Joseph de Lévis.....	E. Ruel.....	$\frac{1}{4}$	12	12 do.....	140 00
Laval and Quebec.....	T. Keough.....	17	2	12 do.....	100 00
Lazy Bogan and New Richmond.....	R. Brash.....	45	6	42 trips.....	273 00
Leeds and Wilson's Mills.....	H. McCutcheon..	2	6	12 months.....	100 00
Les Eboulements and Settrington..	T. Audet.....	8	3	12 do.....	82 48
Les Eboulements and Quai des Eboulements.....	J. Dufour.....	3	3	8 do 13 days (broken period).....	55 50
Les Eboulements and Wharf.....	F. Tremblay & N. Degagné.....	3	As req	Season, 1890.....	132 00
Les Escoumains and Sault au Cochon	J. Boissonneault	35	3	12 months.....	675 00
Les Escoumains and Tadousac.....	F. Brisson.....	27	4	12 do.....	505 00
Lévis and Notre Dame de Lévis.....	E. Bedard.....	$\frac{1}{3}$	13 & 19	9 do (to Dec. 31, '90)..	157 50
do do	M. Gagnon.....	$\frac{1}{3}$	13 & 19	3 do from do.....	52 50
Lévis and Quebec.....	W. Moore.....	1	18 & 12	12 do.....	350 00
do do	S. T. Green, Asst. P.O.I. (to pay).....			Special trips.....	4 00
Lévis and Railway Station (I.C.R.).	H. Martin.....	$\frac{1}{4}$	24	12 months.....	90 00
do do (Q.C.).....	F. Bégin.....	$\frac{1}{4}$	12	12 do.....	45 00
Lévis and St. Anselme.....	do.....	34		Special trip.....	5 10
Lévis and St. Michel.....	M. Guay.....	15	6	9 months (to Dec. 31, '90)	183 75
do do	E. Poire.....	15	6	3 do from do.....	75 00
Lévis and Street Letter Boxes.....	M. Gagnon.....	4	18	12 do.....	356 75
Linière and Metgermette.....	J. Morin.....	13 $\frac{1}{2}$	2	6 do (to Sept. 30, '90)..	48 50
Linière and St. Zacharie.....	T. Gagné.....	9 $\frac{1}{2}$	3	6 do from do.....	48 50
L'Islet and Railway Station.....	M. E. Ballantyne	24	12	12 do.....	140 00
Lorette and Railway Station.....	C. Boutet.....	2	12	12 do.....	168 00
Lorne and Railway Station.....	E. D. Adams.....	200 yds	12	12 do.....	40 00
Lourdes and Somerset.....	J. B. G. Nadeau	8	1	12 do.....	50 00
Maple Grove and Richardville.....	J. Neagle.....	7	3	9 do (to Dec. 31, '90)..	72 00
do do	G. Smith.....	7	3	3 do from do.....	23 75

DETAIL of all payments for Mail Transportation in Quebec Postal Division,  
&c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Maple Grove and Wolfestown.....	R. Boulanger.....	6 $\frac{1}{2}$	2	12 months.....	75 00
Marbleton and Railway Station, &c.	O. Coté.....	3 $\frac{1}{2}$	12	12 do.....	250 00
Maria and Maria East.....	J. Beijold.....	5	3	12 do.....	75 00
Marlow and U.S. Boundary Line.....	J. Farley.....	14 $\frac{1}{2}$	3	12 do.....	120 00
Matane and Railway Station.....	I. Bélanger.....	32	6	9 do (to Dec. 31, '90)..	356 25
do do.....	G. Levesque.....	32	6	3 do from do.....	162 50
Matane and Ste. Anne des Monts.....	J. Labrie.....	57	3	12 do.....	790 00
Matapedia and Runnymede.....	J. Lawlor.....	12	1	12 do.....	70 00
Matapedia and Railway Station.....	E. Dorion.....	200 yds	12	12 do.....	45 00
Melbourne and Richmond Station.....	J. Largie.....	1 $\frac{1}{2}$	12	12 do.....	100 00
Mercier and Notre Dame du Rosaire.....	I. Mercier.....	6	3	11 do (from May 1, '90)	73 33
Metabechouan and St. Gédéon.....	T. Duchaine.....	8	6	12 do.....	300 00
Mont Carmel and Railway Station.....	R. Lavoie.....	3	4	12 do.....	65 00
Montmagny and Railway Station.....	L. P. Gendreau.....	1	12	12 do.....	120 00
do do.....	C. Larcher.....	1	12	12 do.....	100 00
Montmorency Falls and Quebec.....	L. Tessier.....	8	6	12 do.....	280 00
Murray Bay and St. Agnes.....	T. Lapointe.....	9	3	12 do.....	68 00
Murray Bay and St. Paul's Bay.....	A. Bouchard.....	30	6	12 do.....	1,170 00
Murray Bay and St. Siméon.....	H. Savard.....	20	4 & 3	12 do.....	272 00
Murray Bay and Wharf.....	F. Tremblay.....	3	Asreq	Season, 1890.....	95 00
Newbois and Scott Junction.....	C. Genest.....	9	6	12 months.....	300 00
New Carlisle and Wharf.....	T. Caldwell.....	$\frac{3}{4}$	Asreq	Season 1890.....	46 50
Newport and Paspébiac.....	W. P. Ramier.....	32	6	3 mos. (to June 30, '90)..	270 00
Newport and Percé.....	N. G. Tremblay.....	36	6	3 do do.....	320 82
Newport and Wharf.....	J. Jessop.....	$\frac{1}{2}$	Asreq	Season 1890.....	40 00
Newport Point and Wharf.....	do.....	$\frac{1}{2}$	do	do.....	68 00
New Richmond and Stanley House.....	R. Brash.....	1 $\frac{1}{2}$	12	do.....	79 20
Normandin and St. Félicien.....	N. Picard.....	20	3	12 months.....	195 00
Notre Dame de Rimouski and Railway Station.....	A. Parent.....	$\frac{1}{2}$	6	12 do.....	40 00
Notre Dame des Anges & St. Ubalde.....	X. Marcotte.....	11	3	9 do (to Dec. 31, '90)..	70 50
do do.....	U. Hebert.....	11	3	3 do from do.....	36 00
Notre Dame du Portage and Railway Station.....	A. Nadeau.....	7	6	12 do.....	139 00
Old Lake Road and Railway Station.....	P. Caron.....	$\frac{1}{4}$	6	12 do.....	25 00
Painchaud and Somerset.....	J. O. Huard.....	4	3	12 do.....	75 00
Paspébiac and Wharf.....	P. D. Loisel.....	$\frac{3}{4}$	Asreq	Season 1890.....	57 00
Percé and Wharf.....	T. E. Flynn.....	$\frac{1}{2}$	do	do.....	60 50
Perthuis and Railway Station.....	E. L. Sewell.....	200 ft.	12	12 months.....	25 00
Petite Madeleine and Ste. Anne des Monts.....	A. J. Sasseville.....	56	2	9 do (from July 1, '90)	415 02
Pointe aux Orignaux and Rivière Ouëlle.....	J. B. Hudon.....	2 $\frac{1}{2}$	12 & 6	12 do.....	58 32
Pointe aux Trembles and Quebec.....	F. Voyer.....	22	6	12 do.....	598 00
Pointe Bleue and Roberval.....	L. E. Otis.....	5	3	12 do.....	85 00
Point St. Peter and Wharf.....	P. Bond.....	$\frac{1}{4}$	Asreq	Season 1890.....	45 60
Pointe Sèche and St. Paschal.....	A. Desjardins.....	11	3	12 months.....	120 00
Pont Rouge and Railway Station.....	J. Denis.....	$\frac{3}{4}$	12	12 do.....	88 00
Port Daniel Centre and Wharf.....	J. Lawrence.....	3	Asreq	Season 1890.....	152 60
Portneuf and Railway Station.....	E. Marcotte.....	1	12	12 months.....	100 00
Quai de Rimouski and Rimouski.....	C. Grosse.....	2	6	12 do.....	80 00
Quebec and Railway Stations.....	G. Hough.....	$\frac{1}{2}$	12	12 do.....	960 00
Quebec Post Office and Immigration Letter Box.....	E. Corneil.....	$\frac{1}{4}$	Asreq	Season 1890.....	20 00
Quebec, St. François and St. Jean d'Orléans.....	A. Maranda.....	27	6	12 months.....	780 00
Quebec, St. John Suburbs and Street Letter Boxes.....	M. Gingras.....	3	30	12 do.....	363 73
Quebec and St. Sauveur de Quebec.....	J. L. Saucier.....	1 $\frac{1}{4}$	31	12 do.....	646 36
Quebec and St. Tite des Caps.....	F. Cloutier.....	33	6	12 do.....	1,000 00

DETAIL of all payments for Mail Transportation in Quebec Postal Division,  
&c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Quebec and Spencer Cove .....	A. Cullin. ....	5	12	12 months .....	220 00
Quebec and Steamer .....	G. T. Ry. Co. ....			Special service .....	15 00
Quebec and Stoneham .....	J. Corrigan. ....	17	2	12 months .....	145 00
Quebec and Wharf .....	G. Hough. ....		As req	12 do .....	1,534 63
do do .....	J. Chanbesten. ....	13	12	Season 1890. ....	120 00
Reedham and Robertson Station ...	J. Savage. ....	4	1	12 months .....	30 00
Richmond Station and St. Cyr .....	R. E. Dyson. ....	6½	1	12 do .....	50 00
Rimouski and Railway Station .....	L. Lavoie. ....	12	12	12 do .....	174 50
Rimouski and Ste. Blandine .....	P. Proulx. ....	9	2	12 do .....	60 00
River Gilbert and River Gilbert Gold Mines. ....	J. Quirion. ....	3½	6	12 do .....	140 00
Rivière à L'Ours and La Fourche des Chemins .....	J. B. Gaudin. ....	4	1	12 do .....	40 00
Rivière à Pierre and Railway Station	J. S. Murphy. ....	2	12	12 do .....	20 00
Rivière aux Pins and Railway Station (St. Gabriel) .....	P. Hayes. ....	6½	2	12 do .....	52 00
Rivière du Loup and Ry. Station. ...	M. L. Marchand .....	1½	49	12 do .....	773 78
Rivière du Loup and Wharf .....	L. T. Pinze. ....	2½	As req	Season 1890. ....	45 00
Rivière Ouelle and Railway Station.	N. Ancil. ....	5	12	12 months .....	200 00
Rivière Ste. Marguerite & Tadousac.	J. Brisson. ....	21	1	12 do .....	125 00
Rivière Trois Pistoles & Ry. Station.	J. G. Seton. ....	½	12	3 do (to June 30, '90)..	15 00
do do .....	A. Rioux. ....	½	12	9 do from do .....	45 00
Robertson Station and Ry. Station.	A. Talbot. ....	60 yds	12	12 do .....	25 00
Robertson Station and Sacré Cœur de Marie. ....	J. Vallière, jun..	6	6	12 do .....	134 00
Roberval and Railway Station .....	C. Potvin. ....	½	12	12 do .....	60 00
Roberval and St. Prime .....	J. Fradette. ....	10	6	12 do .....	320 00
Ste. Adélaïde de Pabos and Wharf..	R. Manger. ....	½	As req	Season 1890. ....	57 00
St. Adrien and Wotton .....	F. X. Charland. ....	8	3	6 months (to Sept. 30, '90)	45 00
do do .....	N. Dubois. ....	8	3	6 do from do .....	45 00
St. Alban and Railway Station. ....	A. Frenette. ....	7	6	12 do .....	104 00
St. Alexander and Railway Station.	R. Fortin. ....	400 yds	12	12 do .....	40 00
St. Alexander and St. Eleuthère ...	A. Rousseau. ....	24	1	12 do .....	92 00
St. Anaclet and Railway Station .....	C. Rousseau. ....	2½	6	12 do .....	47 00
St. André and Railway Station .....	E. Michaud. ....	4½	8	12 do .....	200 00
Ste. Angèle de Rimouski and Ste. Flavie Station. ....	N. Beaulieu. ....	8	3	12 do .....	80 00
Ste. Anne la Pocatière and Railway Station. ....	J. O. Ouellet. ....	1	12	12 do .....	230 00
Ste. Anne la Pocatière and St. Onésime .....	C. Ouellet. ....	6	3	12 do .....	63 00
St. Anselme and Railway Station ..	F. Lamontagne. ....	1	12	12 do .....	80 00
St. Anselme and Ste. Claire. ....	do .....	7	6	12 do .....	175 00
St. Anselme and Ste. Henedine .....	D. Blais. ....	16		Special trip. ....	2 40
St. Arsène and Viger. ....	O. Gagnon. ....	6	6	12 months .....	150 00
St. Aubert and Railway Station .....	C. Dube. ....	1½	12	12 do .....	100 00
St. Aubert and St. Pamphile. ....	O. Morault. ....	31	2	9 do (to Dec. 31, '90)..	137 50
do do .....	P. St. Pierre. ....	31	2	3 do from do .....	40 00
St. Bazile and Railway Station. ....	F. Paquet. ....	2½	6	12 do .....	80 00
St. Bazile Station and Ry. Station. ...	C. A. Delage. ....	120 yds	6	12 do .....	12 00
St. Bruno and St. Paschal. ....	P. Côté. ....	7	1	12 do .....	50 00
St. Casimir and Railway Station .....	L. Martin. ....	4½	12	12 do .....	216 00
St. Casimir and St. Ubalde .....	J. Soular. ....	11	3	12 do .....	145 00
Ste. Catherine and Railway Station	P. Julien. ....	1	6	12 do .....	70 00
St. Charles and Railway Station. ....	E. Bilodeau. ....	1	6	12 do .....	25 00
Ste. Claire and St. Malachie. ....	P. Turgeon. ....	10	6	12 do .....	190 00
St. Clément and St. Cyprien. ....	G. Dallaire. ....	5	2	6 do (from Oct. 1, '90).	20 00
St. Clément and St. Eloi. ....	A. Boutot. ....	12	3	12 do .....	125 00
St. Cyrille and Railway Station. ....	J. B. Cloutier. ....	7½	2	12 do .....	104 00
St. Cyrille and St. Marcel .....	P. Dancause. ....	15	1	11 do (from May 1, '90).	68 75
St. Damase de Rimouski and Railway Station. ....	A. Langlais. ....	7	3	12 do .....	80 00



DETAIL of all payments for Mail Transportation in Quebec Postal Division,  
&c.—Continued.

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
St. David de Lévis and Hadlow Cove Road.	J. Halle.	1	6	12 months.	50 00
St. Denis and Railway Station.	F. Thibeault.	4	12	12 do	125 00
St. Edmond and Stoneham.	J. Corrigan.	5	2	12 do	50 00
St. Eloi and Railway Station.	P. Langelier.	3	6	12 do	100 00
St. Etienne du Saguenay and Tadousac.	H. P. Blair.	10	2	12 do	234 00
St. Evariste de Forsyth and Railway Station.	F. St. Pierre.	26	6	12 do	524 72
St. Evariste de Forsyth and St. Honoré.	J. Jobin, sen.	7	6	12 do	120 00
St. Fabien and Railway Station.	E. Jean.	1	12	12 do	47 00
St. Famille and St. Pierre d'Orléans.	A. Maranda.	8	3	12 do	120 00
St. Félicien and St. Prime.	P. Rousseau.	9	3	12 do	152 16
St. Félicien and Ticonabé.	O. Perreault.	5	3	6 do (to Oct. 31, '90).	45 00
St. Flavie and Ry. Station (Express)	P. Chouinard.	3	12	6 do (to Sept. 36, '90).	74 74
do do do	P. E. Chouinard.	3	12	6 do from do	87 37
do do do (Local)	P. Chouinard.	3	12	6 do (to Sept. 30, '90).	74 74
do do do	P. E. Chouinard.	3	12	3 do (to Dec. 31, '90).	37 37
do do do	P. Chouinard.	3	12	3 do from do	37 37
St. François Montmagny and Railway Station.	E. C. Boulet.	1½	6	12 do	72 00
St. François Xavier de Viger and Viger.	P. Dionne.	6	3	9 do (to Dec. 31, '90).	49 50
do do do	J. Martin.	6	3	3 do from do	25 00
St. Frédéric and Railway Station.	J. Baillargeon.	2	6	12 do	100 00
St. Frédéric and St. Séverin de Beauvillage.	F. X. Plante.	6	3	12 do	100 00
St. Gabriel Station and Ry. Station.	A. W. Landrigan.	10 yds	6	12 do	16 00
St. George East and St. Prosper de Dorchester.	J. Parent.	12½	1	12 do	55 68
St. Gervais and Railway Station.	F. Roy.	5½	6	12 do	112 50
St. Gervais and St. Lazare.	J. Belanger.	6	6	12 do	179 00
St. Gervais and St. Nérée.	J. Goulet.	9	3	12 do	100 00
St. Hélène and Railway Station.	J. B. Berubé.	1½	12	12 do	28 00
St. Hérodine and Railway Station.	J. Mercier.	4	12	12 do	50 00
St. Hérodine and Scott Junction.	D. Grenier.	14		Special trip.	2 10
St. Henri and Railway Station.	T. Couet.	1½	12	12 months	70 00
St. Henri and St. Isidore.	A. Samson.	10	6	3 do (to June 30, '90).	38 00
do do do	M. Fortin.	10	6	9 do from do	150 00
St. Henri and St. Lambert.	P. Lacasse.	10	6	6 do (to Sept. 30, '90).	99 50
do do do	A. Boucher.	10	6	3 do (to Dec. 31, '90).	45 00
do do do	Z. Buteau.	10	6	3 do from do	50 00
St. Henri Station and Ry. Station.	G. Demers.	1¼	12	12 do	75 00
St. Jean de Dieu and Trois Pistoles.	M. D'Auteuil.	17	3	12 do	188 00
St. Jean Port Joli and Ry. Station.	G. Poitras.	1½	12	12 do	160 00
St. Louise and Railway Station.	A. Ancil.	1½	12	12 do	50 00
St. Luce and Railway Station.	L. St. Laurent.	2	12	12 do	112 72
St. Malachie and Standon.	N. Hebert.	13	6	12 do	176 00
St. Mathieu and St. Simon.	A. D'Anjou.	3	3	12 do	79 00
St. Moise and Railway Station.	J. Smith.	2½	6	12 do	90 00
St. Moise Station and Ry. Station.	J. Vaillancourt.	60 yds	12	12 do	24 00
St. Pacôme and Railway Station.	P. Hudon.	1½	12	12 do	112 00
St. Patrick and Railway Station.	T. C. Picard.	4	24	2 do 6 days (to Sept. 6, '90).	236 00
St. Paul du Buton and St. Pierre Montmagny.	A. B. Cloutier.	17	3	9 do (to Dec. 31, '90).	142 50
do do do	E. Proulx.	17	3	3 do from do	68 75
St. Paul's Bay and St. Tite des Caps.	F. Bouchard.	26	6	12 do	1,248 00
St. Paul's Bay and St. Urbain.	T. Fortin.	9	6	12 do	215 97
St. Paul's Bay and Wharf.	C. Bouchard.	3	As req	Season 1890.	176 00
St. Philippe de Néry and Ry. Station.	F. Dechene.	¾	12	12 months	40 00
St. Pierre Montmagny and Railway Station.	N. Samson.	2	12	12 do	100 00

DETAIL of all payments for Mail Transportation in Quebec Postal Division,  
&c.—*Concluded.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
St. Raphaël and Railway Station...	P. Gauthier.....	6	6	12 months.....	150 00
St. Raymond and Railway Station..	P.A.H. Pelletier.....	12	3	do (to June 30, '90).	10 00
do do	J. Beaurpré.....	12	9	do from do	49 50
St. Samuel de Gayhurst and Valletort.....	J. Dallaire.....	8	4	12 do	100 00
St. Sauveur de Québec and Street Letter Boxes.....	J. L. Saucier.....	2	24	12 do	196 00
St. Simeon and Tadousac.....	F. Bouliane.....	22	4 & 3	12 do	460 00
St. Simon and Railway Station.....	J. B. Martin.....	1	12	12 do	48 00
Ste. Sophie de Megantic and Somerset, &c.....	S. Belleau.....	7 & 13	6 & 3	12 do	320 00
St. Valier and Railway Station.....	J. Corriveau.....	3	6	12 do	80 00
Sayabec and Railway Station.....	H. Boulay.....	60 yds	12	12 do	18 00
Scott Junction and Beauce Junction	G. Garon.....			Special trip	1 80
Scott Junction and Railway Station	do	60 yds	12	12 months.....	50 00
Sillery Cove and Spencer Cove....	M. A. McCor-				
	mick.....	1½	6	12 do	42 00
Somerset and Railway Station.....	J. B. Lemieux.....	1	6	1 do (from Mar. 1, '91)	4 16
South Ham and Railway Station...	L. P. A. Darche.....	12	6	12 do	273 00
South Quebec and Railway Station.	J. Ritchie.....	200 yds	36	12 do	150 00
Stoneham and Tewkesbury.....	X. Deschamps.....	7½	2	12 do	50 00
Tadousac and Wharf.....	P. Marquis.....	1	As req	Season 1890.....	26 40
Thetford Mines and Railway Station	S. Blondeau.....	150 yds	12	11 months (to Feb. 28, '91)	27 50
do do	N. S. Larochelle.....	150 yds	12	1 do from do	2 50
Trahan's Mills and Weedon Station.	A. Trahan.....	1½	12	10 do (to Jan. 31, '91).	62 50
do do	A. Tanguay.....	1½	12	2 do from do	12 50
Tring Station and Railway Station.	E. Vallée.....	3	12	12 do	40 00
Trois Pistoles and Railway Station.	T. P. Pelletier.....	1	12	12 do	80 00
Trois Saumons and Railway Station	B. Gaumond.....	2	6	12 do	68 00
Valcartier and Railway Station....	J. McBain.....	6	6	12 do	185 00
Village des Aulnais and Ry. Station	J. B. Sirois.....	5	12	12 do	225 00
Weedon Centre and Railway Station	L. Geguière.....	2	12	12 do	110 00
				Total.....	\$68,231 86

WILLIAM WHITE,

*Deputy Postmaster-General.*

W. H. SMITHSON,  
*Accountant.*



## STRATFORD POSTAL DIVISION.

DETAIL of all payments for Mail Transportation in Stratford Postal Division,  
made within the Year ended 30th June, 1891.

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Aberdeen and Durham.	L. Eldridge.	11	3	12 months.	73 00
Aberdour and Railway Station.	G. Christie.	$\frac{1}{4}$	6	12 do	70 00
Allan Park and Hampden.	H. Byers.	5	2	12 do	75 00
Allan Park and Lamash.	E. Earls.	5	3	12 do	110 00
Allenford and Owen Sound.	T. N. Williamson.	$13\frac{3}{4}$	6	12 do	120 00
Allenford and Southampton.	W. Gilbert.	11	6	12 do	245 00
Allenford and Railway Station.	J. Dean.	$\frac{1}{2}$	12	9 do (to Dec. 31, '90).	99 27
do do	do	$\frac{1}{2}$	18	3 do from do	44 95
Allenford and Skipness.	J. Davidson.	$4\frac{1}{2}$	2	12 do from do	78 75
Alma and Railway Station.	J. H. Walker.	$\frac{1}{2}$	12	12 do	110 00
Alma and Winfield.	J. Hattin.	8	3	12 do	125 50
Alsfeldt and Railway Station.	H. Ziegler.	$1\frac{1}{2}$	6	12 do	100 00
Anaranth Station and Railway Station.	J. Lacon.	$\frac{1}{2}$	6	12 do	40 00
Amberley and Lurgan.	J. W. Gamble.	$4\frac{1}{2}$	3	12 do	80 00
Arkwright and Mount Hope.	W. F. Sithes.	$3\frac{3}{4}$	2	12 do	70 00
Armow and Kincardine.	G. Stirling.	11	3	12 do	167 00
Arnott and Railway Station.	W. S. Murray.	$\frac{1}{2}$	12	12 do	60 00
Arthur and Fergus.	W. E. Draper.	12	6	12 do	190 00
Arthur and Metz.	J. A. Smellie.	6	2	12 do	80 00
Arthur and Monck.	W. Hamilton.	13	2	12 do	195 50
Arthur and Railway Station.	J. Buschlen.	1	24	12 do	125 00
Ashley and Rockford Station.	G. Follis.	$1\frac{1}{4}$	3	12 do	50 00
Atwood and Mitchell.	J. McKay.	17	6	9 do (to Dec. 31, '90).	324 00
do do	G. Kort.	17	6	3 do from do	106 25
Atwood and Railway Station.	D. Gordon.	$\frac{1}{2}$	6	12 do	52 00
Auburn, Blyth and Fordyce.	M. A. Moore.	6 & 12	6 & 3	12 do	395 72
Ayr and Railway Station.	W. Hilborn.	$\frac{1}{2}$	24	9 do (to Dec. 31, '90).	151 04
do do	C. D. Green.	$\frac{1}{2}$	24	3 do from do	50 00
Ayton and Railway Station.	H. Ringel.	$1\frac{1}{2}$	12	3 do (to June 30, '90).	22 50
do do	A. O'Farrell.	$\frac{1}{2}$	12	4 do 23 days (to Nov. 23, '90).	37 71
do do	do	$\frac{1}{2}$	18	4 do 7 days from do	49 48
Baden and Wellesley.	C. Harefeld.	9	6	12 do	350 00
Badenoch and Mildmay.	A. Kleist.	$4\frac{1}{2}$	1	12 do	30 00
Balaclava and Johnson.	T. P. Johnstone.	2	3	12 do	35 00
Ballinafad and Georgetown.	J. W. McKee.	6	6	12 do	250 00
Bamberg and St. Agatha.	F. Walter.	$5\frac{1}{2}$	2	12 do	72 00
Bayfield and Clinton.	R. Beattie.	$12\frac{1}{2}$	6	12 do	270 00
Beechwood and Seaforth.	G. K. Holland.	$6\frac{1}{2}$	2	12 do	107 50
Belfast and Lane's.	J. Mullin.	4	2	12 do	80 00
Belfast and St. Helen's.	do	$2\frac{1}{4}$	6	12 do	150 00
Belgrave and Bushfield.	J. Newcombe.	6	2	12 do	75 00
Belgrave and Marnoch.	P. Porterfield.	$3\frac{1}{2}$	3	12 do	60 00
Belgrave and Railway Station.	S. Morley.	$\frac{1}{2}$	12	12 do	132 00
Belmore and Wroxeter.	A. Orr.	$6\frac{1}{2}$	6	12 do	174 00
Belwood and Craigsholme.	J. Hanna.	3	3	12 do	60 00
Belwood and Dracon.	do	$7\frac{1}{2}$	2	12 do	71 00
Belwood and Railway Station.	do	$\frac{1}{2}$	12	12 do	65 00
Benmiller and Goderich.	J. Miller.	6	3	12 do	150 00
Berkley and Glascott.	R. English.	6	2	12 do	84 00
Berkley and Railway Station.	J. Lund.	$\frac{1}{2}$	6	12 do	80 00
Berlin and Crosshill.	J. T. Wilford.	$16\frac{1}{2}$	6	9 do (to Dec. 31, '90).	292 50
do do	W. Wilford.	$16\frac{1}{2}$	6	3 do from do	87 50
Berlin and Street Letter Boxes.	H. Bachmann.	4	18	12 do	200 00
Berlin and West Montrose.	H. Whitchee.	$14\frac{1}{2}$	6	12 do	500 00
Berlin and Yatton.	T. Hunt.	19	6	12 do	315 00
Binkham and Erin.	W. Wansbrough.	$4\frac{1}{2}$	2	12 do	70 00
Black's Corners and Laurel.	J. Graham.	4	1	12 do	48 00



DETAIL of all payments for Mail Transportation in Stratford Postal Division,  
&c.—Continued.

Name of Route,	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Blair and Railway Station.....	J. Renshaw. ....	1 <sup>1</sup> / <sub>2</sub>	6	12 months .....	20 00
Bluevale and Railway Station. ....	J. Gardner. ....	12	12	do .....	139 00
Blyth and Railway Station .....	L. H. Shaw. ....	24	7	do (to Oct. 31, '90)..	102 08
do do .....	R. & S. Beattie. ....	24	4	do (to Feb. 28, '91).	58 34
do do .....	W. Bell. ....	24	1	do from do .....	14 58
Bognor and Woodford. ....	H. Atcheson. ....	6	3	12 do .....	88 00
Bornholm and Brodhagen. ....	G. Leonhardt. ....	4	3	12 do .....	122 50
Bosworth and Riverbank. ....	J. G. Hollis. ....	3	2	12 do .....	50 00
Bowling Green and Laurel Railway Station. ....	R. Banks. ....	5	6	12 do .....	159 00
Breslau and Weissenburg. ....	A. Hoch. ....	8	6	12 do .....	227 50
Brisbane and Coningsby. ....	J. W. Burt. ....	4	2	12 do .....	40 00
Briton and Hammond. ....	M. A. Alexander. ....	14 <sup>1</sup> / <sub>2</sub>	3	12 do .....	45 00
Briton and Railway Station. ....	do .....	6	12	do .....	60 00
Brookholm and Owen Sound. ....	J. Mills. ....	2	3	3 do (to June 30, '90).	18 75
do do .....	W. Johnston. ....	2	3	9 do from do .....	33 75
Brookholm and Shouldice. ....	W. Doherty. ....	7	1	12 do .....	55 00
Brotherston and Newbridge. ....	W. Chapman. ....	2	2	12 do .....	41 72
Brucefield and Railway Station. ....	W. Dixon. ....	12	12	do .....	128 34
Brunner and Railway Station. ....	J. Attridge. ....	6	12	do .....	30 00
Brussels and Cranbrook. ....	V. Gramm. ....	5	6	12 do .....	160 00
Brussels and Railway Station. ....	R. & S. Beattie. ....	12	12	do .....	150 00
Calderwood and Railway Station (Alsfeldt). ....	A. Calder. ....	3	3	12 do .....	80 00
Camilla and Whittington. ....	T. Sanderson. ....	44 <sup>1</sup> / <sub>2</sub>	3	3 do (to June 30, '90).	18 75
do do .....	M. Sanderson. ....	44 <sup>1</sup> / <sub>2</sub>	3	9 do from do .....	56 25
Cape Croker and Colpoys Bay. ....	E. Cross. ....	15	2	3 do (to June 30, '90).	50 00
do do .....	L. Spragge. ....	15	2	9 do from do .....	97 50
Cargill and Railway Station. ....	C. W. Keeling. ....	12	7	do 23 days (to Nov. 23, '90)..	62 09
do do .....	do .....	18	4	do 7 days from do ..	44 15
Carlingford and Sebringville. ....	R. Crawford. ....	84 <sup>1</sup> / <sub>2</sub>	3	12 do .....	148 16
Carlsruhe and Railway Crossing. ....	C. Lobsinger. ....	14 <sup>1</sup> / <sub>2</sub>	12	3 do (to June 30, '90).	27 50
do do .....	G. Bruder. ....	14 <sup>1</sup> / <sub>2</sub>	12	9 do from do .....	101 25
Carmuncock and Moncton. ....	A. Campbell. ....	4	2	12 do .....	60 00
Carthage and Tralee. ....	B. Donegan. ....	2	3	9 do (to Dec. 31, '90)..	30 00
Chatsworth and Chesley. ....	J. Edgar. ....	23 <sup>3</sup> / <sub>4</sub>	3	12 do .....	390 00
Chatsworth and Durham. ....	N. McIntyre. ....	20	6	12 do .....	435 00
Chatsworth and Railway Station. ....	D. Rae. ....	24	12	do .....	125 20
Chatsworth and Watters' Falls. ....	E. Wickham. ....	12 <sup>1</sup> / <sub>2</sub>	3	12 do .....	200 00
Chepstowe and Dunkeld Station. ....	J. T. Lacey. ....	24	6	12 do .....	115 00
Chesley and Railway Station. ....	T. R. Reed. ....	12	3	do (to June 30, '90).	20 00
do do .....	T. Trelford. ....	12	4	do 23 days (to Nov. 23, '90)..	31 74
do do .....	do .....	18	4	do 7 days from do ..	38 86
Chesley and Scone. ....	D. M. Halliday. ....	14 <sup>1</sup> / <sub>2</sub>	3	12 do .....	40 00
Cheviot and Riversdale. ....	A. McLean. ....	3	2	12 do .....	65 00
Clavering and Railway Station. ....	A. Bennett. ....	12	12	do .....	60 00
Clifford and Huntingfield. ....	J. Gordon. ....	7	2	12 do .....	75 00
Clifford and Lakelet. ....	W. J. Halladay. ....	6	6	12 do .....	156 00
Clifford and Railway Station. ....	K. M. Walton. ....	12	12	do .....	100 00
Clinton and Railway Station. ....	J. Cunningham. ....	48	3	do (to June 30, '90).	93 60
do do .....	J. Beattie. ....	48	9	do from do .....	225 00
Clinton and Summerhill. ....	G. M. Kilty. ....	44	2	12 do .....	50 00
Colpoys Bay and Wiarton. ....	L. Hyatt. ....	3	6	12 do .....	115 00
Conroy and St. Paul's Station. ....	J. Grady. ....	24	2	12 do .....	60 00
Corwhin and Nassagaweya. ....	A. McKenzie. ....	6	2	12 do .....	96 00
Cotswold and Elora. ....	J. McEachern. ....	23	6	12 do .....	420 00
Cranbrook and Moncrieff. ....	C. Dahms. ....	4	1	12 do .....	27 00
Crawford and Elmwood. ....	D. McRae. ....	9	3	6 do (to Sept. 30, '90).	75 00
do do .....	G. T. Shewell. ....	9	3	6 do from do .....	57 50
Crewe and Dunganon. ....	M. Shackleton. ....	5	1	12 do .....	26 00
Crieff and Puslinch. ....	J. McDonald. ....	3	6	12 do .....	100 00

DETAIL of all payments for Mail Transportation in Stratford Postal Division,  
&c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Cruikshank and Owen Sound .....	W. T. Barfoot...	6	3	6 months (to Sept. 30, '90)	50 00
do do .....	C. Barfoot.....	6	3	6 do from do ..	50 00
Dashwood and Exeter .....	W. Reynolds .....	81	6	12 do .....	160 00
Deemerton and Mildmay .....	A. Kneneman .....	23	6	12 do .....	90 00
Derby Mills and Tara .....	J. T. Hall .....	33	1	9 do (from July 1, '90)	26 25
Derrynane and Kenilworth .....	J. Hayes .....	53	2	12 do .....	60 00
Desboro' and Marmion .....	R. M. Clements.	4	3	2 do 2 days (to June 2, '90)	11 94
Dobbinton and Marmion.....	W. J. Turner .....	51	3	9 do (from July 1, '90)	51 75
Dobbinton and Railway Station.....	J. Douglas.....	16	9	9 do (to Dec. 31, '90)..	71 25
do do .....	T. H. Rolston.....	16	9	3 do from do ..	12 00
Dobbinton Railway Station and Williscroft .....	B. Talbot.....	43	3 & 2	9 do (to Dec. 31, '90)..	97 50
do do .....	J. Foster .....	43	6 & 2	3 do from do ..	28 75
Donegal and Atwood Ry. Station .....	A. Buchanan .....	44	6	12 do .....	135 00
Doon and Railway Station .....	J. H. Thompson .....	16	6	12 do .....	20 00
Dorking and Newton .....	B. Donegan.....	13	6	9 do (to Dec. 31, '90)..	225 00
do do .....	W. True .....	13	6	3 do from do ..	62 00
Drayton and Glen Allan.....	W. Stubbs .....	10	6	12 do .....	290 00
Drayton and Railway Station .....	H. Gordon.....	1	24	12 do .....	144 00
Drew and Railway Station .....	W. Cardwell.....	2	6	12 do .....	70 00
Dromore and Greenside .....	R. Legate .....	24	2	12 do .....	40 00
Dromore and Holstein .....	J. Henderson .....	9	6	3 do (to June 30, '90).	53 75
do do .....	G. Sackett .....	9	6	9 do from do ..	160 86
Drysdale and Kippen .....	W. J. Howard .....	10	3	12 do .....	121 00
Dublin and Farquhar .....	J. Kay .....	11	6	12 do .....	238 00
Dublin and Railway Station.....	J. Myers .....	1	24	12 do .....	106 42
Dumblane and Paisley .....	J. McNeil .....	53	3	2 do (to May 31, '90)..	14 16
Dunkeld and Railway Station .....	J. B. Tschirhardt .....	14	6	12 do .....	90 00
Durham and Flesherton Station.....	J. H. Stuart .....	14	6	12 do .....	360 00
Durham and Railway Station .....	H. J. Middaugh .....	1	12	12 do .....	60 00
Durham and Walkerton .....	G. Crittenden.....	16	6	12 do .....	297 00
Dyer's Bay and Lion's Head .....	W. Channon .....	16	2	12 do .....	273 00
Eden Mills and Guelph .....	R. Middleton .....	16	6	12 do .....	288 00
Egerton and Mount Forest.....	J. Hunter .....	16	3	3 do (to June 30, '90).	75 00
do do .....	J. Devine .....	16	3	9 do from do ..	168 75
Egmondville and Seaforth.....	D. Hay .....	1	6	12 do .....	80 00
Elmwood and Malcolm .....	A. B. Kerr .....	23	3	12 do .....	59 00
Elmwood and Railway Station .....	F. Haller .....	1	12	12 do .....	50 00
Elora and Inverhaugh .....	R. Ariss .....	4	2	12 do .....	60 00
Elora and Rutland .....	D. S. Frey .....	5	2	10 do 6 days (to Feb. 6, '91)	51 17
Elora and Railway Station (C. V. R.) .....	T. Biggar .....	1	12	12 do .....	75 00
do do (W. G. & B.) .....	M. Salvidge .....	1	36	12 do .....	137 48
Elora and Saleu .....	J. R. Wissler .....	1	6	12 do .....	40 00
Elsinore and French Bay .....	H. Shannon .....	5	1	12 do .....	40 00
Erbsville and Waterloo .....	J. Simmermacher .....	5	1	12 do .....	45 00
Erin and Guelph .....	W. L. T. Moore .....	20	6	12 do .....	450 00
Erin and Railway Station .....	R. Wood .....	1	12	12 do .....	50 00
Eskdale and Tiverton.....	G. H. Ord .....	5	3	12 do .....	90 00
Ethel and Railway Station.....	W. Spence .....	7	6	8 do (to Nov. 30, '90).	53 33
do do .....	do .....	7	12	4 do from do ..	50 00
Exeter and St. Marys .....	D. Spicer .....	24	6	12 do .....	724 00
Fairview and Stratford .....	W. Bell .....	9	3	12 do .....	156 00
Farewell and Kenilworth .....	P. McIntosh .....	6	6	9 do (to Dec. 31, '90)..	100 50
do do .....	W. Bailey .....	6	6	3 do from do ..	33 50
Farewell and Wagram .....	C. Bailey .....	3	2	12 do .....	25 00
Farquhar and Lunley .....	F. Pollen .....	4	2	12 do .....	65 00
Fergus and Living Springs.....	F. J. Armstrong .....	6	2	12 do .....	75 00
Fergus and Ry. Station (C. V. R.) .....	J. C. Morrow .....	1	12	12 do .....	100 00
do do (W. G. & B.) .....	do .....	1	36	12 do .....	150 00
Fish Creek and Granton .....	W. Blatchford .....	5	2	12 do .....	60 00

DETAIL of all payments for Mail Transportation in Stratford Postal Division,  
&c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Flesherton and Railway Station...	P. Munshaw...	1 $\frac{3}{4}$	24	9 months (to Dec. 31, '90,	
do do	W. P. Crossley	1 $\frac{3}{4}$	24	less fine) from do	116 00
Flesherton and Vandeleur	J. Warling	6 $\frac{3}{4}$	3	do do	39 00
Fordwich and Newbridge	W. Chapman	4 $\frac{1}{2}$ & 8	2 & 6	do do	90 00
Fordwich and Railway Station	R. Mahood	1 $\frac{1}{2}$	12	do do	159 72
Freeborn and Peffer's Crossing	J. Freeborn	60 rds.	6	do (to Sept. 30, '90)..	112 00
do do	H. Freeborn	60 rds.	6	do from do	15 00
Fullarton and Gowrie	W. H. Woodley	3	3	do do	15 00
Fyfield and Teeswater	A. Gibson	5	2	do do	57 00
					60 00
Galt and Glen Morris	T. Scott	7	6	do do	240 00
Galt and Railway Station (C.V.R.)	G. Hancock	3 $\frac{1}{4}$	24	do do	200 00
do do (G.T.R.)	do	4	6	do do	25 00
Garry Owen, Johnson and Owen Sound	H. Lemon	10 & 13	3	do do	369 00
Glamis and Pinkerton Station	J. McKeeman	9	6	do do	268 00
Glamis and Willow Creek	G. Kidd	4 $\frac{1}{2}$	2	do do	45 00
Glen Annan and Railway Station	A. Anderson	1 $\frac{1}{4}$	12	do do	48 00
Glen Eden and Mount Forest	C. Hunt	5	6	do do	150 00
Glen Farrow and Wingham	W. Mackersie	6	2	do do	75 00
Goderich and Kintail	M. Whitty	16 $\frac{1}{2}$	6	do do	450 00
Goderich and Lucknow	J. Mullin	23	6	do do	398 00
Goderich and Railway Station	do	1	24	do do	187 84
Goldstone and Railway Station	M. Waind	1 $\frac{3}{4}$	6	do do	100 16
Gorrie and Railway Station	H. J. Besanson	1 $\frac{1}{4}$	12	do do	160 00
Gorrie and Seaforth	S. Walsh	28 $\frac{1}{2}$	6	do (less fine).	517 00
Gowanstown and Kurtzville	M. Mennear	5	3	do do	100 00
Gowanstown and Railway Station	H. Markle	1	6	do do	58 00
Gowanstown and Wallace	do	3 $\frac{1}{2}$	6	do do	100 00
Grand Valley and Monticello	H. Mills	11	2	do do	114 86
Grand Valley and Peepabun	J. Loree	3 $\frac{1}{4}$	2	do do	37 00
Grand Valley and Railway Station	S. McDonald	1	12	do do	39 00
Gresham and Paisley	Trelford & Flack	20	2	do do	148 48
Grimston and Keady	R. Keys	4	2	do do	50 00
Guelph and Ponsoby	J. L. Halley	12	3	do do	250 00
Guelph and Shiloh	T. Hamilton	15 $\frac{1}{4}$	2	do do	194 00
Guelph and Street Letter Boxes	J. D. Johnston	5	13	do do	250 00
Hanover and Railway Station	R. Pace	1 $\frac{1}{2}$	12	7 do 23 days (to Nov. 23, '90).	58 03
do do	do	1 $\frac{1}{2}$	18	4 do 7 days from do	35 23
Harlock and Seaforth	T. Neilands	13	3	do do	280 00
Harriston and Ry. Station (G.T.R.)	C. H. Ward	1	36	do do	84 51
do do (T., G. & B.)	do	1 $\frac{1}{2}$	12	do do	28 17
Hawkesville and Macton	J. McCormick, jr.	7	6	do do	156 00
Haysville and New Hamburg	R. Blatchford	31 $\frac{1}{2}$	6	do do	148 00
Henfryn and Railway Station	J. H. Thompson	1 $\frac{1}{4}$	6	do do	40 00
Hensall and Railway Station	J. Sutherland	1 $\frac{1}{4}$	12	do do	100 16
Hensall and Rodgerville	H. Doan	9 $\frac{1}{4}$	6	do do	200 00
Hensall, Zurich and Ry. Station	T. Murdock	61 $\frac{1}{2}$	12	do do	320 00
Hepworth and Railway Station	T. Kemp	12	12	do do	160 00
Hereward and Railway Station	J. Hanna	4 $\frac{1}{2}$	6	do do	130 00
Hillsburgh and Railway Station	J. Carmichael	1	6	do do	80 00
Hoath Head and Owen Sound	M. Dealy	7	1	do 6 days (to Feb. 6, '91)	51 17
do do	G. Currie	7	2	1 do 20 days (from Feb. 9, '91).	15 58
Holland Centre and Lily Oak	J. T. Kelly	41 $\frac{1}{2}$	1	do do	50 00
Holland Centre and Ry. Station	C. Price	1 $\frac{1}{4}$	24	do do (less fines).	107 00
Holmesville and Porter's Hill	A. Knox	4	3	do do	75 00
Holmesville and Railway Station	do	1 $\frac{1}{4}$	12	do do	50 00
Holstein and Murdoch	G. Pollock	4	3	do do	74 72
Holstein and Nenagh	T. Stephenson	8 $\frac{1}{2}$	6	do do	234 00



DETAIL of all payments for Mail Transportation in Stratford Postal Division,  
&c.—Continued.

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Holstein and Railway Station.....	S. Seaman .....	1	12	3 months (to June 30, '90)	13 25
do do .....	A. Doupe.....	1	12	9 do from do .....	36 00
Huston and Moorefield Ry. Station.....	R. Shera.....	1	12	9 do (to Dec. 31, '90)...	45 00
Huston and Treacastle.....	D. Callaway.....	4	3	9 do do .....	72 00
Inverhuron and Tiverton .....	D. McKenzie.....	3	3	12 do .....	60 00
Invermay and Railway Station.....	A. Neelands.....	4	12	12 do .....	156 50
Johnson's Mills and Zurich.....	D. Spencer .....	4	2	12 do .....	49 00
Kemble and Wolseley .....	J. Hearn .....	5	1	12 do .....	40 00
Kenilworth and Petherton .....	M. Enright.....	3	6	12 do .....	125 00
Kenilworth and Railway Station.....	C. J. Gordon .....	3	12	12 do .....	80 00
Kenneyville and Mitchell Road.....	J. Kenney.....	2 1/2	2	12 do .....	80 00
Killeen and Leslie Station.....	A. Wilkinson.....	1 1/2	6	9 do (to Dec. 31, '90)...	56 25
do do .....	J. A. Wilkinson.....	1 1/2	6	3 do from do .....	22 50
Kincardine and Kintail.....	Bayne & McIn- tyre.....	17	6	12 do .....	497 48
Kincardine and Port Elgin .....	J. Gentles .....	24	6	12 do .....	617 00
Kincardine and Railway Station.....	J. Harkin .....	1 1/4	30	12 do .....	300 00
Kincardine and Walkerton .....	N. Bushell.....	28	6	12 do .....	698 00
Kingarfi and Kinloss.....	B. Moulton.....	4	2	12 do .....	60 00
Kinghurst and Mooresburg .....	J. A. King.....	5 1/2	2	12 do .....	52 00
Kinkora and Sebringville.....	J. Fletcher.....	12	3	12 do .....	160 00
Kinloss and Lucknow .....	J. Brownscombe .....	10	6	12 do .....	200 00
Kinlough and Westford .....	A. W. Haldenby .....	3 1/2	2	12 do .....	55 00
Kippen and Railway Station.....	R. Mellis.....	12	12	12 do .....	100 16
Kossuth and Preston .....	H. Sohrt .....	5 1/2	2	12 do .....	70 48
Lake Charles and Oxenden .....	J. Davidson .....	5	1	12 do .....	40 00
Langside and Lucknow .....	F. Greer.....	6 1/2	2	12 do .....	90 00
Lebanon and Moorefield .....	J. Sinclair.....	8	3	12 do .....	150 00
Lindenwood and Presque Isle .....	G. Shaw.....	5	1	12 do .....	41 00
Linwood and St. Jacob's.....	P. Toole.....	12	6	12 do .....	365 00
Lion's Head and Wiarton.....	C. Williams.....	55 r.t.	3	4 do (to July 31, '90)...	116 67
do do .....	do .....	22	3	8 do from do .....	266 66
Lisbon and Wellesley.....	P. Glebe.....	2	2	12 do .....	60 00
Lisburn and Ripley.....	D. Teskey.....	2 1/4	2	12 do .....	25 00
Listowel and Molesworth.....	E. Terry.....	11	6	12 do .....	248 00
Listowel and Ry. Station (G., B. & L. E.)	C. Hacking.....	1	18	9 do (to Dec. 31, '90)...	82 50
do do do .....	J. A. Hacking.....	1	12	3 do from do .....	15 00
do do do (W., G. & B.)	J. Shank.....	1	12	12 do .....	100 00
Lochlash and Ripley .....	J. McRitchie.....	8	3	12 do .....	144 00
Londesborough and Ry. Station.....	J. Bell.....	12	12	12 do .....	156 50
Lucknow and Railway Station.....	W. Mellis .....	1	30	12 do .....	313 00
Mar and Red Bay .....	J. McFarlane.....	7	2	12 do .....	77 00
Markdale and Railway Station.....	W. J. Manley .....	1	24	9 do (to Dec. 31, '90)...	66 75
do do .....	W. Turner.....	1	24	3 do from do .....	22 25
Markdale and Traverston.....	T. Edwards.....	8 & 9 1/2	2 & 3	12 do .....	127 00
Marsville and Hillsburgh Station .....	J. Hanna.....	7 1/2	6	12 do .....	325 00
Meaford and Owen Sound .....	M. Leavens.....	20	12	12 do .....	250 00
Merritt and Varney.....	J. G. Wilson .....	5	2	1 do .....	75 00
Mildmay and Railway Station.....	G. Herringer .....	1	12	12 do .....	100 00
Milverton and Railway Station.....	W. H. Dorland.....	1	12	12 do .....	124 80
Mimosa and Orton .....	I. Cawthra.....	4 1/2	3	12 do .....	72 00
Mitchell and Railway Station.....	W. W. Hicks.....	1	24	12 do .....	150 24
Mitchell and Russeldale.....	J. Cole.....	8	6	12 do .....	200 00
Molke and Neustadt.....	K. Lanz.....	2 1/2	3	12 do .....	71 25
Moorefield and Railway Station.....	R. Shera.....	1	12	9 do (to Dec. 31, '90)...	36 00
do do .....	do .....	1	12	3 do from do .....	24 00
Moorefield and Treacastle.....	do .....	3	6	3 do (from Jan. 1, '91)	18 00
Morningdale Mills and Millbank Station.....	J. Lintick .....	5	12	12 do .....	275 00

DETAIL of all payments for Mail Transportation in Stratford Postal Division,  
&c.—*Continued*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Mossborough and Railway Station..	J. I. Hobson...	10	12	12 months	60 00
Motherwell and St. Mary's	J. R. Pettapiece.	10	3	12 do	150 00
Mount Forest and Railway Station (G., B. & L. E.).....	J. H. Coyne ..	12	12	do	54 75
Mount Forest and Railway Station (T., G. & B.).....	do	24	12	do	109 55
Musselburg and Poole .....	W. Burgman ..	6	12	do	30 00
Neustadt and Railway Station....	W. T. Glendinning.	12	3	do (to June 30, '90)..	25 00
do do	L. Himmeler ..	12	4	do 23 days (to Nov. 23, '90)..	29 36
do do	do	18	4	do 7 days from do	35 32
Nithburg and Stratford.....	H. Kumpf.	16	6	12 do	400 00
North Bruce and Queen Hill.	D. McKinnon.	23	3	12 do	89 00
North Keppel and Owen Sound..	W. Johnston ..	21	3	12 do	291 25
Olivet and Rothesay.....	J. Tremain..	4	2	12 do	60 00
Orangeville and Railway Station..	R. Mann.....	42	12	do	230 04
Orangeville and Vanatter .....	W. J. Glover ..	5	2	12 do	88 00
Orton and Railway Station .....	W. Mooney.....	12	12	do	50 00
Owen Sound and Railway Station..	W. Bridget ..	1	24	12 do	200 00
Owen Sound and Street Letter Boxes	do	23	18	12 do	148 06
Owen Sound and Tara.....	J. Hamilton ..	20	6	12 do	610 00
Oxenden and Wiarton.....	J. Crandon ..	3	6	12 do	120 00
Paisley and Railway Station.....	Trelford & Flack	24	12	do	131 40
Paisley and Vesta.....	R. Cruikshank..	16	6	3 do (to June 30, '90).	97 50
do do	W. Cruikshank..	16	6	9 do from do	202 50
Palmerston and Railway Station..	J. Taggart.....	36	7	do 23 days (to Nov. 23, '90)..	108 65
do do	do	48	4	do 7 days, from do	64 64
Parkhead and Railway Station....	F. Pattison.....	12	12	do	75 00
Petersburg and Roseville .....	F. Kramel ..	10 & 14	6 & 3	12 do	418 25
Petersburg and St. Agatha.....	J. Kaiser ..	2	6	12 do	125 00
Pinkerton and Railway Station ..	J. Connor ..	2	6	12 do (less fine).....	94 00
Pomona and Priceville.....	D. Black ..	5	2	12 do	95 00
Port Elgin and Railway Station ..	J. Bowes.....	24	12	do	95 00
Port Elgin and Tara .....	F. Monkman ..	16	6	12 do	320 00
Preston and Strasburg.....	F. C. Cornell..	8	6	12 do	330 00
Preston and Waterloo.....	J. S. Bechtel..	10	12	12 do	469 00
Priceville and Flesherton Station..	J. Cairns.....	4	6	12 do	120 00
Purple Grove and Ripley .....	J. N. Logan ..	5	1	12 do	45 00
Puslinch and Railway Station .....	H. Leslie ..	12	9	do (to Dec. 31, '90).	26 25
do do	H. W. Ironside..	12	3	do from do	10 00
Ripley and Railway Station.....	P. D. McInnes..	12	6	do (to Sept. 30, '90).	42 00
do do	J. McInnes.....	12	6	do from do	42 00
St. Paul's Station and Ry. Station.	A. Thom.....	12	12	do	62 60
Sauble Falls and Wiarton.....	H. Crandon ..	2	2	12 do	130 00
Seaforth and Railway Station .....	S. Dickson ..	24	12	do	187 80
Sebringville and Railway Station..	J. R. Paton ..	12	12	do	90 00
Solway and Walkerton .....	J. McCallum ..	6	3	12 do	144 00
Southampton and Railway Station..	T. Lee.....	18	12	do	155 59
Spry Stokes Bay .....	J. Shute ..	6	3	4 do (to July 31, '90).	38 33
Stokes Bay and Tobermory.....	D. Butchart ..	26	1	12 do	192 00
Stokes Bay and Wiarton.....	H. Crandon ..	31	3	8 do (from Aug. 1, '90)	330 00
Stratford and Railway Station.....	A. Hirst.....	48	9	do (to Dec. 31, '90).	272 24
do do	T. A. Johns ..	48	3	do from do	87 78
Stratford and Street Letter Boxes.	T. Stoney ..	12	12	do (to June 30, '91).	441 24
Stratford Post Office and Military Camp.....	do		11	days (to June 28, '90).	11 00

DETAIL of all payments for Mail Transportation in Stratford Postal Division,  
&c.—*Concluded.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Tara and Railway Station.....	J. Hamilton. ....	12	7	do 23 days (to Nov. 23, '90)..	76 91
do do .....	do .....	18	4	do 7 days, from do	55 26
Teeswater and Railway Station...	W. Zinger. ....	18	12	do (less fine)..	147 00
Teeswater and Walkerton .....	L. Zettel. ....	16	6	12 do	459 60
Topping and Railway Station.....	E. Taylor. ....	6	6	12 do	225 00
Varney and Railway Station. ....	F. Eden. ....	12	12	do	64 00
Waldemar and Railway Station. ...	D. Jenkins. ....	12	9	do (to Dec. 31, '90).	48 00
do do .....	do .....	12	3	do from do	21 25
Walkerton and Railway Station...	A. McLean.....	14	24	12 do	313 00
Waterloo and Railway Station....	F. Sass. ....	2	30	12 do	375 00
Whitechurch and Railway Station..	H. D. Henderson	12	12	do	80 00
Warton and Railway Station.....	I. Post. ....	12	7	do 23 days (to Nov. 23, '90).....	80 84
do do .....	do .....	24	1	do 7 days (to Dec. 31, '90).....	23 23
do do .....	L. Hyatt. ....	24	3	do from do	51 25
Wingham and Ry. Station (C.P.R.)	W. Black. ....	12	6	do (to Sept. 30, '90).	35 00
do do (C.P.R.) .....	A. Roe. ....	12	6	do from do	35 00
do do (G.T.R.) .....	D. Campbell....	24	12	do	200 32
Woxeter and Railway Station.....	A. Paulin. ....	12	12	do	80 00
Total.....					\$45,636 21

WILLIAM WHITE,  
*Deputy Postmaster-General.*

W. H. SMITHSON,  
*Accountant.*



## THREE RIVERS POSTAL DIVISION.

DETAIL of all payments for Mail Transportation in Three Rivers Postal Division, made within the Year ended 30th June, 1891.

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					8 cts.
Arthabaskaville and North Ham...	J. Côté.....	21	6	12 months.	396 00
Arthabaskaville and Railway Station	F. Perreault ..	2½	12	10 do (from June 1, '90)	91 66
do do	G. A. Bourgeois, to pay ..	2½	12	Special trips ..	2 18
Arthabaskaville and Victoriaville..	P. Bergeron ..	2½	12	6 months (to Sept. 30, '90)	45 00
do do	P. Lavigne. ....	2½	6	6 do from do	39 50
Arthabaskaville, Victoriaville and Railway Station.....	F. Perreault....	1 & 2½	6 & 12	2 do (to May 31, '90)	9 66
Aston Station and Railway Station.	A. Ouellette....	120 yds	6	12 do	20 00
Aston St'n and St. Leonard d'Aston	N. Doucette....	9	6	12 do	250 00
Aston Station and St. Sylvere ..	J. Taillon. ....	5½	3	12 do	80 00
Batiscan and Railway Station.....	T. Laguerre ....	1½	12	12 do	100 00
Batiscan and St. Pierre les Becquets	F. Maguy, jun..	3	6	12 do	150 00
Beaurivage and Parkhurst. ....	T. Walker .....	3	6	3 do (to June 30, '90)	14 50
do do	J. Machell .....	3	6	9 do from do	43 50
Becancour and Ste. Gertrude.....	A. Roy .....	10½	6	12 do	244 00
Becancour and St. Gregoire .....	N. Vigneault ..	9	6	12 do	197 16
Berthier and Isle Dupas .....	P. Moreau .....	2½	3	12 do	60 00
Berthier and Railway Station .....	F. Plante.....	2½	13	12 do	162 50
Berthier Junction and St. Felix de Valois. ....	S. Tessier.....	13	6	12 do	480 00
Blandfold and Stanfold.....	N. Brule .....	9	4	6 do (to Sept. 30, '90)	58 37
do do	T. Leblanc.....	9	4	6 do from do	62 24
Cap Magdeleine and Ry. Station...	O. Toupin ....	5	12	12 do	180 00
Champlain and Railway Station...	N. Abel .....	2	12	12 do	90 00
Chantelle and Rawdon.....	M. Crepeau.....	17	3	12 do	200 00
Charlemagne and L'Assomption....	J. Belhumeur ..	9	6	12 do	250 00
Chatillon and St. Zepherin.....	C. Castonguay ..	5½	3	9 do (to Dec. 31, '90)	48 00
do do	E. Beliveau....	5½	3	3 do from do	24 75
Chaumont and St. Agapit .....	T. Paquet .....	3	3	12 do	40 00
Cococacache and La Tuque .....	T. A. Reynolds ..	48	1	12 do	50 00
Craig's Road Station and St. Sylves- ter East .....	M. Vaillancourt.	24	6	12 do	492 00
D'Auteuil and Kingsey Falls.....	J. D. Morin ...	6½	2	12 do	80 00
East Arthabaska and Larochelle ...	L. D. Boulanger.	4	3	12 do	60 00
East Arthabaska and St. Fortunat...	P. Juneau.....	17	3	12 do	21½ 00
East Arthabaska and Stanfold.....	B. Poisson.....	5	6	12 do	125 00
Fortierville & St. Jean d'Eschailons	J. B. Fortier....	11	3	12 do	130 00
Gentilly and Leclercville.....	N. Beauchaine..	25	6	12 do	570 00
Gentilly and Three Rivers.....	do .....	16	6	12 do (less fine).....	391 00
Grand Mère and Lac à la Tortue...	G. A. Bourgeois, to pay ..	2½	6	3 do (to June 30, '90)	15 00
do do	R. Pincombe....	2½	6	9 do from do	45 00
Grand Mère and Ste. Flore .....	J. Dieziel.....	4	6	12 do	136 00
Grandes Piles and La Tuque .....	P. Chandonnet..	72	1	12 do	237 00
Grand St. Esprit and Ste. Monique de Nicolet.....	J. A. Pinard .....	2¾	3	12 do	50 00
Hunterstown and Louiseville .....	H. Durand .....	17	6	12 do	299 00
Joliette and Railway Station.....	J. Mirault.....	8	12	12 do	544 00
Joliette and St. Liguori .....	A. B. Desy.....	9	6	12 do	225 00
Joliette and Ste. Melanie .....	C. Été.....	14	6	12 do	285 00
Joliette and St. Paul d'Industrie....	F. Perreault....	4	6	12 do	72 00

DETAIL of all payments for Mail Transportation in Three Rivers Postal Division, &c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Kildare and St. Alphonse . . . . .	G. E. Trudeau..	12	3	12 months . . . . .	156 00
La Baie and Nicolet . . . . .	T. Vigneau . . .	9	6	12 do . . . . .	249 00
La Baie and St. Zepherin . . . . .	do . . . . .	8	6	12 do . . . . .	220 00
La Baie and Yanaska . . . . .	do . . . . .	24½	6	12 do . . . . .	750 00
Lac à la Tortue and Railway Station	J. Brunelle . . .	8 rods	12	6 do (to Sept. 30, '90, and arrears) . . .	20 83
do do . . . . .	J. Buisson . . .	8 rods	12	6 do from do . . .	12 50
Lachenaie and Terrebonne . . . . .	C. Panze . . . .	4½	6	12 do . . . . .	123 00
Lanoraie and Railway Station . . . . .	M. Delisle . . .	6	6	12 do . . . . .	89 50
L'Assomption and St. Sulpice . . . . .	J. Royal . . . .	5	6	3 do (to June 30, '90)	43 75
do do . . . . .	P. H. Royal . . .	5	6	9 do from do . . .	131 25
Laurentides and Railway Station . . . . .	J. M. V. Latour	¼	12	12 do . . . . .	75 00
Laurentides and St. Calixte de Kil- kenney . . . . .	P. Chartrand . . .	10	3	12 do . . . . .	120 00
Lavaltrie and Railway Station . . . . .	A. Lavolette . . .	8	6	12 do . . . . .	192 00
Leclercville and Railway Station . . . . .	L. Langlois . . .	18	6	12 do . . . . .	600 00
L'Épiphanie and Railway Station . . . . .	E. Leblanc . . . .	¾	12	12 do . . . . .	100 00
L'Épiphanie and St. Jacques . . . . .	G. Forest . . . .	12½	6	12 do . . . . .	325 00
L'Épiphanie and Ste. Julienne . . . . .	T. Belle . . . . .	18	6	12 do . . . . .	480 00
Lotbinière and Rivière Boisclair . . . . .	F. X. Beaudet . . .	6	3	12 do . . . . .	78 00
Louiseville and Nancy . . . . .	R. Caron . . . .	6	2	12 do . . . . .	60 00
Louiseville and Railway Station . . . . .	P. Lefebvre . . .	½	12	12 do . . . . .	99 00
Louiseville and St. Ursule . . . . .	A. Sevignie . . .	5½	6	12 do . . . . .	99 00
Maddington Falls and Ry. Station . . . . .	M. Crochetière..	4½	6	9 do (to Dec. 31, '90)	60 00
do do . . . . .	A. Trudel . . . .	4½	6	3 do from do . . .	23 75
Mascouche and Mascouche Rapids . . . . .	G. Alexander . . .	3½	3	6 do (to Sept. 30, '90)	37 50
do do . . . . .	J. Carmichael . . .	3½	3	6 do from do . . .	37 50
Mascouche and Railway Station . . . . .	P. Robert . . . .	1¼	6	12 do . . . . .	79 00
Mastigoche & St. Gabriel de Brandon	I. O. Heinault . . .	9	1	12 do . . . . .	36 00
Méthot's Mills and Ste. Agathe de L.	L. L. Ratté . . . .	8	6	12 do . . . . .	180 00
Méthot's Mills and Ste. Flavien . . . . .	do . . . . .	4	6	12 do . . . . .	125 00
New Armagh and St. Sylvester . . . . .	J. Orr . . . . .	4½	2	12 do . . . . .	50 00
Nicolet and St. Gregoire . . . . .	J. Page . . . . .	8	12	12 do . . . . .	374 00
Nicolet and St. Monique . . . . .	H. Beaudry . . .	8	6	12 do . . . . .	150 00
Pierreville and St. Elphege . . . . .	J. Boivin . . . .	7	6	12 do . . . . .	190 00
Point du Lac and Railway Station . . . . .	A. Biron . . . . .	¼	12	12 do . . . . .	80 00
Pont de Maskinongé and Ry. Station . . . . .	A. Lafrenière . . .	¾	12	12 do . . . . .	50 00
Pont de Maskinongé and St. Justin . . . . .	E. M. Chapde- laine . . . . .	5	6	12 do . . . . .	240 00
Proulxville and St. Tite . . . . .	J. R. Lafontaine	6	3	2 do (to June 30, '90)	14 16
do do . . . . .	J. Rancourt . . .	6	3	9 do from do . . .	55 50
Rawdon and St. Liguori . . . . .	E. Rowan . . . .	9	6	12 do . . . . .	147 00
Repentigny and St. Paul l'Ermite . . . . .	A. Perrault . . .	2	6	12 do . . . . .	80 00
River David and Railway Station . . . . .	O. Houde . . . .	¾	12	12 do . . . . .	60 00
River David and St. Pie de Guire . . . . .	I. Dauplaise . . .	8	6	2 do (from Feb. 1, '91)	33 33
Rivière Noire and Railway Station . . . . .	A. E. Beauche- min . . . . .	10 yds	12	12 do . . . . .	20 00
Rivière Noire and St. Valère de Bul- strode . . . . .	do . . . . .	4½	6	12 do . . . . .	160 00
St. Agapit and Railway Station . . . . .	J. Paquet . . . .	½	12	12 do . . . . .	75 00
St. Alexis des Monts and St. Paulin	J. B. Drolet . . .	10	6	12 do . . . . .	350 00
St. Alphonse and Ste. Beatrix . . . . .	E. Riopel . . . .	4	3	12 do . . . . .	75 00
St. Alphonse and St. Come . . . . .	A. Labine . . . .	12	2	12 do . . . . .	112 00
Ste. Angèle de Laval and Ry. Station	M. B. Desilets . .	¼	12	9 do (to Dec. 31, '90)	18 00
do do . . . . .	J. Coulombe . . .	¼	12	3 do from do . . .	6 00
Ste. Anne de la Pérade and Railway Station . . . . .	J. U. Marcotte..	½	12	12 do . . . . .	105 00

DETAIL of all payments for Mail Transportation in Three Rivers Postal Division, &c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Ste. Anne de la Pérade and St. Prosper.	J. Cossette.....	7	6	12 months	108 00
Ste. Antoine and St. Apollinaire...	J. H. Lambert..	5	3	12 do	75 00
St. Barnabé and St. Eli.	A. Menancon...	9	6	12 do	195 00
St. Barnabé and Yamachiche.....	C. Gélinais...	12	6	12 do	190 00
St. Barthélemi and Railway Station	J. B. Joinville..	11½	12	11 do (to Feb. 28, '91).	82 50
do do	do	1½	12	1 do from do	5 75
Ste. Brigitte des Saults and Ste. Monique.....	H. St. Pierre....	13	3	12 do	150 00
St. Célestin and Railway Station...	D. Arseneau....	14	6	6 do (to Sept. 30, '90).	30 00
do do	E. Arseneau....	14	6	6 do from do	30 00
Ste. Clothilde and Victoriaville....	P. Lavigne.....	18	6	12 do	214 00
Ste. Croix and St. Nicholas.....	F. Marion.....	18	6	12 do (less fine).	501 00
St. Cuthbert and Railway Station...	D. Langevin....	3	6	6 do (to Sept. 30, '90).	34 50
do do	E. Tellier.....	3	6	3 do (to Dec. 31, '90).	17 25
do do	I. Grandchamp..	3	6	3 do from do	17 25
St. Cuthbert Station and Ry. Station	J. Marchand...	300 yds	12	12 do	12 00
St. Damien de Brandon and St. Gabriel de Brandon.....	L. Peltier.....	6	4	12 do	190 00
St. Didace and St. Gabriel de Brandon.....	E. Germain.....	6	6	12 do	140 00
St. Donat de Montcalm and St. Théodore de Chertsey.....	W. Ritchie.....	29½	1	12 do	140 00
Ste. Emelie de l'Energie and St. Jean de Matha.....	G. Clermont....	12	2	12 do	190 00
Ste. Emelie de l'Energie and St. Michel des Saints.....	A. Basinais.....	33	2	12 do	400 00
Ste. Eulalie and Railway Station...	E. Prince.....	4	6	12 do	110 00
St. Félix de Valois and St. Jean de Matha.....	E. Léssard.....	8	6	12 do	200 00
St. Gabriel de Brandon and St. Norbert.....	D. Prevost....	10½	6	12 do	285 00
Ste. Geneviève de Batiscan and Railway Station.....	O. Prenevost, jr.	4	12	12 do	97 50
Ste. Geneviève de Batiscan and St. Stanislas.....	A. Despins.....	8	6	12 do	171 25
Ste. Gertrude and Ste. Marie de Blandford.....	D. Beauchesne..	6	3	12 do	45 00
St. Jacques and Ste. Marie Solomée	A. Mireault....	4	2	12 do	50 00
St. Narcisse and Trois Pistoles....	C. Hamelin.....	19	6	12 do	380 00
St. Norbert and Railway Station...	S. Carpentier...	9	6	12 do	290 00
St. Pierre les Becquets and Ste. de Sophie de Lévard.....	D. Fournier....	12	3	12 do	125 00
St. Rémi de Tingwick and Warwick	N. Champagne..	13	6	12 do	396 00
Ste. Thecle and St. Tite.....	F. Boutet.....	9	6	12 do	140 00
St. Tite and Railway Station.....	G. Lahaye.....	6	6	12 do	139 00
Shawenegan and Three Rivers.....	J. E. H. Lapolice	21	6	12 do	390 00
Stanford and Railway Station.....	P. Nadeau.....	240 yds	12	12 do	25 00
Three Rivers and Railway Station..	H. C. Godin....	11½	37	6 do (to Sept. 30, '90)	240 50
do do	J. P. Marineau..	3¼	31	6 do from do	132 60
Three Rivers & Street Letter Boxes.	do	2	18	12 do	300 00
Three Rivers and Valmont.....	H. Sigman.....	15	3	12 do	160 00
Vincennes and Railway Station....	M. Dessureault..	3	6	12 do	150 00
Walker's Cutting and Ry. Station...	S. Labrecque....	120 yds	12	12 do	24 00
Warwick East and Railway Station	E. Martet.....	180 yds	6	12 do	18 00
Yamachiche and Railway Station...	H. Decoteau....	1½	12	12 do	58 00



DETAIL of all payments for Mail Transportation in Three Rivers Postal Division, &c.—*Concluded.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Yamaska and Railway Station.....	L. H. Lafleur....	35 yds	12	12 months .....	32 00
Yamaska East and Railway Station	L. Leveille.....	180 yds	12	11 do 10 days (to Mar. 10, '91). ..	28 25
				Total.....	\$21,115 94

WILLIAM WHITE,  
*Deputy Postmaster-General.*

W. H. SMITHSON,  
*Accountant.*

## TORONTO POSTAL DIVISION.

DETAIL of all payments for Mail Transportation in Toronto Postal Division made within the year ended 30th June, 1891.

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Abingdon and Canfield .....	W. Young .....	12	3	12 months .....	155 00
Abingdon and Winona. ....	J. Williams. ....	15½	3	12 do .....	239 00
Acton and Knatchbull. ....	T. Wilson .....	5	2	12 do .....	75 00
Acton and Speyside .....	do .....	5	2	12 do .....	75 00
Agincourt—C. P. Ry. & Midland Ry	W. Lawton .....	12	12	do .....	125 00
Agincourt and Railway Station ..	do .....	6	12	do .....	30 00
Air Line Junction and Ry. Station.	M. Minnes .....	6	12	do .....	40 00
Alberton and Lynden .....	B. Dunham. ....	7½	6	12 do .....	188 00
Albion, Castlederg and Mt. Wolfe.	S. J. Snell .....	6 & 5	6 & 3	12 do .....	260 00
Albion and Railway Station .....	T. D. Elliott. ....	1	24	12 do .....	60 00
Aldershot and Waterdown .....	W. Prudham .....	3½	12	12 do .....	120 00
Algoma Mills and Railway Station.	H. F. McQuire ..	12	12	do .....	125 20
Allanburg and Railway Station .....	W. Livingstone. ....	12	12	do .....	106 40
Alloa and Edmonton .....	W. Goulding .....	6	3	9 do (to Dec. 31, '90).	67 50
do do .....	R. Campbell .....	6	3	3 do from do .....	22 50
Alton and Railway Station .....	A. Menzies .....	1	12	12 do .....	100 16
Amigari and Railway Station .....	A. B. Hurrell .....	1	12	12 do .....	65 00
Ancaster and Hamilton .....	J. Phillips .....	7	12	12 do .....	238 00
Appleby and Railway Station .....	J. Prescott .....	4½	6	12 do .....	82 00
Armada and Unionville .....	M. R. Hemming- way .....	5½	3	12 do .....	89 48
Ash and Railway Station .....	J. Allan .....	1	6	12 do .....	44 00
Ashgrove and Georgetown .....	E. Nixons .....	4	6	12 do .....	218 75
Attercliffe Station and Ry. Station.	J. Sundry .....	1	12	12 do .....	100 00
Aurora and Schomberg .....	W. Pinkerton .....	15	6	12 do .....	445 00
Aurora and Railway Station .....	D. W. Doan .....	1	24	12 do .....	120 00
Aurora and White Rose .....	do .....	12 r. t.	3	12 do .....	150 00
Ballantrae and Railway Station .....	R. Hill .....	1	12	12 do .....	60 00
Barrie Island and Gore Bay .....	W. N. Runnalls. ....	12	1	12 do .....	100 00
Bar River, Echo Bay & Ry. Station.	W. Findlay .....	8 & 1½	1 & 6	12 do .....	75 00
Beamsville and Rosedene .....	C. McKay .....	11	6	12 do .....	355 00
Bedford Park and Toronto .....	J. Hendry .....	5½	6	1 do 19 days (from Feb. 10, '91) .....	45 83
Belfountain and Railway Station ..	N. Herring .....	1½	6	9 do (to Dec. 31, '90).	56 25
do do .....	C. Byam .....	1½	6	3 do from do .....	28 75
Bellingham and Ironbridge .....	D. Bell .....	11	1	11 do (from May 1, '90)	45 83
Bendale and Woburn .....	J. Yeoman .....	2	6	6 do (to Sept. 30, '90).	40 00
do do .....	W. L. Larway .....	2	6	6 do from do .....	40 00
Bethany and Railway Station .....	N. M. Kelly .....	1½	12	12 do .....	90 00
Binbrook and Glandford Station ..	J. Henderson .....	5	6	12 do .....	170 00
Black Creek and Railway Station ..	I. H. Allen .....	1	12	12 do .....	62 60
Blackstock and Cadmus .....	T. W. Robertson ..	2½	6	12 do .....	100 00
Blackstock and Purple Hill .....	W. Bartley .....	4	2	12 do .....	55 00
Blind River and Railway Station ..	W. R. Lawton .....	1	6	12 do .....	62 60
Blizzard Mine and Sudbury .....	J. Ferguson .....	6½	6	1 do (from Mar. 1, '91)	20 83
Bowmanville and Caesarea .....	J. McCrea .....	19	6	3 do (to June 30, '90).	125 00
do do .....	E. Gifford .....	19	6	7 do (to Jan. 31, '91).	282 33
do do .....	do .....	24½	6	2 do from do .....	93 41
Bowmanville and Courtice .....	C. W. Lent .....	4½	3	12 do .....	80 00
Bowmanville and Tyrone .....	J. Moore .....	7	6	3 do (to June 30, '90).	35 75
do do .....	R. Hodge .....	7	6	9 do from do .....	112 50
Brampton and Huttonsville .....	J. Hyatt .....	4	6	12 do .....	110 00
Brampton and Nortonville .....	J. Norton .....	3	3	12 do .....	50 00
Brampton and Railway Station .....	A. J. Hood .....	12	12	12 do .....	108 75
Bronte and Railway Station .....	J. S. McDonald .....	1½	12	12 do .....	125 20
Brookfield Station and Ry. Station.	M. Topp .....	2	6	12 do .....	50 00
Brooklin and Railway Station .....	R. D. Hay .....	1	12	12 do .....	70 00
Brougham and Markham .....	S. G. Reesor .....	13	6	12 do .....	400 00
Brougham and Whitby .....	J. Scott .....	12	6	12 do .....	400 00

DETAIL of all payments for Mail Transportation in Toronto Postal Division,  
&c.—Continued.

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Bruce Mines and Cloudslee .....	N. McEwan .....	5	1	12 months .....	40 00
Bruce Mines and Cockburn Island..	C. Hendrickson..	42	1	Part of seasons '89-90 and '90-91. ....	200 00
Bruce Mines and MacLennan.....	do .....	24½	2	do do .....	211 50
Bruce Mines and Rydal Bank.....	W. R. Smyth.....	6½	2	12 months .....	104 00
Bruce Mines and Railway Station..	W. Fleming.....	2	12	12 do .....	313 00
Brunswick and Railway Station.....	L. C. Patterson..	1½	6	12 do .....	60 00
Burlington and Port Nelson.....	W. Bamford.....	1½	6	12 do .....	90 00
Burlington and Railway Station.....	do .....	1½	6	12 do .....	90 00
Burlington Beach and Ry. Station..	J. Hughes.....	1	12s 3w	Part of seasons '89-90 and '90-91. ....	44 40
Burnaby and Railway Station.....	W. A. Kinnard..	2	3	12 months .....	50 00
Caldwell and Caledon .....	N. Patterson.....	4½	6	12 do .....	208 12
Caledon and Railway Station .....	do .....	12	18	12 do .....	81 00
Caledonia and Sinclairville.....	S. Arrell.....	15	6	2 do (from Feb. 1, '91)	70 00
Campbellcroft and Railway Station.	A. Smith.....	70 ft.	6	12 do .....	35 00
Campbell's Cross, Cheltenham and Railway Station.....	A. S. Campbell..	½ & 21 r. t.	12 & 6	12 do .....	339 00
Campbellville and Railway Station.	S. R. Lister.....	1	6	12 do .....	50 00
Canboro' Canfield and Warner, &c..	I. Swayze.....	6 & 2½	6 & 3	12 do .....	197 16
Carleton West and Railway Station.	J. Hayes.....	1½	12	12 do .....	50 00
Carluke and Hamilton .....	W. Young.....	13½	6	3 do (to June 30, '90).	100 00
do do .....	W. J. Walker ..	13½	6	9 do from do ..	240 00
Carville and Sherwood.....	J. Coombs.....	2	6	12 do .....	80 00
Castlemore and Kleinburg Station..	J. Hugill, jun..	14 r. t.	6	12 do .....	250 00
Cataract and Railway Station.....	J. Howard.....	1½	12	12 do .....	67 50
Cedar Dale and Railway Station..	W. Coleman.....	1½	25	12 do .....	125 00
Chelmsford and Railway Station.....	E. Belanger.....	1½	3	12 do .....	30 00
Cherrywood and Whitevale.....	W. R. Summerfeldt	3½	3	3 do (to June 30, '90)	23 75
do do .....	A. McPherson..	3½	3	9 do from do ..	75 00
Chippawa and Niagara Falls.....	J. C. Hull.....	6	12	12 do .....	500 00
Churchville and Railway Station..	T. A. Fogarty..	1½	6	12 do .....	80 00
Claremont and Railway Station.....	E. Derusha.....	1½	12	12 do .....	109 55
Claremont and Stouffville.....	J. Sellers.....	19 r. t.	6	6 do (to Sept. 30, '90)	156 50
do do .....	J. Yake, jun..	19 r. t.	6	6 do from do ..	135 00
Clarke and Kendal.....	M. Stanton.....	6½	6	12 do .....	181 52
Clarke and Railway Station.....	J. Pethick.....	5½	12	12 do .....	278 57
Clarkson and Railway Station.....	W. W. Clarkson	1½	6	12 do .....	25 00
Clyde and Railway Station.....	E. McNichol ..	1½	6	12 do .....	95 00
Coleman and Railway Station.....	T. Gibson.....	1½	12	12 do .....	120 00
Collins' Inlet and Killarney .....	D. De Lamorandière	18	1	12 do .....	153 40
Cook's Mills and Railway Station..	C. E. Smith.....	1½	12	12 do .....	125 20
Cooksville and Railway Station.....	C. R. Colwell..	1	12	12 do .....	147 50
Copetown and Orkney.....	D. Barnard.....	3	6	12 do .....	180 00
Copper Cliff and Sudbury.....	W. Gilfoy.....	5	6	9 do (to Dec. 31, '90)	93 75
do do .....	T. Smiles.....	5	6	3 do from do ..	31 25
Credit Forks and Railway Station..	G. G. Smith.....	1½	12	12 do .....	78 00
Crowland and Welland.....	J. McQueen.....	4	3	12 do .....	109 05
Davenport and Fairbank .....	D. McComb.....	21½	6	12 do .....	93 40
Davenport and Railway Station.....	W. Rowntree..	50 yds	12	12 do .....	20 00
Desert and Stobie Station.....	J. W. Alderson.	7	2	12 do .....	62 40
Don and Toronto.....	A. Hogg.....	8	6	12 do .....	360 00
Dovercourt and Yorkville.....	H. W. Handcock	4½	6	12 do .....	125 00
Downview and Railway Station.....	J. E. Clarke.....	1½	6	12 do .....	87 50
Drumquin and Milton.....	J. McIntosh.....	18 r. t.	6	12 do .....	300 00
Dunbarton and Frenchman's Bay Station .....	W. Pizer.....	2½	13	6 do (to Sept. 30, '90)	62 50
do do .....	B. Pizer.....	2½	13	6 do from do ..	62 50



DETAIL of all payments for Mail Transportation in Toronto Postal Division,  
&c.—Continued.

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Dunbarton and Liverpool Market..	W. Pizer .....	1	6	6 months (to Sept. 30, '90)	38 00
do do .....	B. Pizer .....	1	6	6 do from do .....	38 00
Dundas and Hamilton .....	J. Herriman .....	5	6	12 do .....	125 00
Dundas and Sheffield .....	J. Moore .....	14 $\frac{1}{2}$	6	12 do .....	449 00
Dunnville and Railway Station .....	M. Culleton .....	4 $\frac{1}{2}$	18	12 do .....	127 76
Dunnville and Wellandport .....	L. Durham .....	12	6	12 do .....	312 00
Edgeley and Thornhill Station .....	A. Winger .....	2	6	3 do (to June 30, '90)	31 20
do do .....	J. Burkholder .....	2	6	9 do from do .....	91 50
Edmonton and Railway Station .....	W. Goulding .....	3 $\frac{1}{2}$	6	12 do .....	30 00
Eglington and Toronto .....	J. Hendry .....	4 $\frac{1}{2}$	6	10 do 9 days (to Feb. 9, '91)	232 50
Elcho and Smithville .....	E. Evans .....	8	2	12 do .....	69 48
Elder's Mills and Railway Station .....	D. Elder .....	1 $\frac{1}{2}$	6	12 do .....	91 50
Elia and Railway Station .....	S. T. Brooks .....	3 $\frac{1}{2}$	6	12 do .....	75 00
Elizabethville and Port Hope .....	T. Roberts .....	32 r. t.	6	6 do 14 days (to Oct. 14, '90)	269 00
do do .....	J. F. Beatty .....	30 r. t.	6	5 do 17 days from do .....	217 11
Elmbank and Malton .....	I. Sanders .....	25 r. t.	6	12 do .....	367 00
Emery and Railway Station .....	J. Watson .....	4 $\frac{1}{2}$	6	12 do .....	50 00
Enfield and Oshawa .....	W. J. Fisher .....	14	3	12 do .....	124 80
Fleetwood and Franklin .....	W. Stacy .....	2	4	12 do .....	70 00
Fonthill and North Pelham .....	J. A. McQueen .....	10	3	12 do .....	220 00
Fort Erie and Railway Stations .....	H. C. Lewis .....	13 $\frac{1}{2}$	48	12 do .....	360 00
Fort William and Railway Station .....	J. Livingstone .....	1 $\frac{1}{2}$	12	12 do .....	245 00
Fort William West and Ry. Station .....	A. McLaren .....	1 $\frac{1}{2}$	12	12 do .....	120 00
Franconia and Perry Station .....	A. Clark .....	7 $\frac{1}{2}$	6	12 do .....	137 00
Franklin and Railway Station .....	J. Hadden .....	100 ft.	12	12 do .....	70 00
Freelton and Mountsberg .....	B. B. Johnson .....	3 $\frac{1}{2}$	3	12 do .....	100 00
Freeman and Railway Stations .....	E. B. Freeman .....	1 $\frac{1}{2}$	30	12 do .....	93 90
Garden River and Railway Station .....	W. R. Cunningham .....	1	3	12 do .....	78 50
Garrison Road and Stevensville .....	J. D. Gilmour .....	10	2	12 do .....	120 00
Georgetown and Railway Station .....	McCollum & Watson .....	1 $\frac{1}{2}$	18	12 do .....	125 00
Georgetown and Terra Cotta .....	J. H. Orr .....	6	6	12 do .....	172 00
Glamorgan and Millbrook .....	J. Kennedy .....	6	2	12 do .....	100 00
Glanford Station & Railway Station .....	H. Clark .....	1 $\frac{1}{2}$	6	12 do .....	50 08
Glen Major and Myrtle .....	W. R. Derby .....	7	6	12 do .....	224 00
Goodwood and Railway Station .....	M. Chapman .....	1 $\frac{1}{2}$	12	12 do .....	60 00
Gore Bay and Kagawong .....	W. H. Baxter .....	12	1	Part of seasons '89-90 and '91-92	46 00
Gore Bay and Meldrum Bay .....	R. T. Hall .....	58	1	6 months (to Sept. 30, '90)	182 50
do do .....	R. Porter .....	58	1	6 do from do .....	162 50
Gore Bay and Perivale .....	R. T. Hall .....	17	1	12 do .....	115 00
Gore Bay and Spanish River Station .....	W. H. Baxter .....	24 & 33	2	Part of seasons '89-90 and '90-91	480 00
Gormley and Unionville .....	J. Lunan .....	25 r. t.	6	12 months .....	380 00
Goulais' Bay and Sault Ste. Marie Station .....	A. McAuley .....	26	1	12 do .....	234 00
Grassy's Corners & Smithville Road .....	R. H. Walker .....	2	2	12 do .....	35 00
Greenbank and Blackwater Junction .....	E. Dusty .....	6 $\frac{1}{2}$	6	12 do .....	165 00
Green Bay and Little Current .....	C. Skippen .....	12	1	12 do .....	70 00
Green River and Railway Station .....	F. Burgess .....	1 $\frac{1}{2}$	12	9 do (to Dec. 30, '90)	75 00
do do .....	R. Stephenson .....	1 $\frac{1}{2}$	12	3 do from do .....	23 50
Grimsby and Smithville .....	J. H. McCollum .....	8	12	3 do (to June 30, '90)	99 75
do do .....	G. H. Merritt .....	8	12	9 do from do .....	375 00
Grimsby Park and Railway Station .....	N. Phelps .....	4 $\frac{1}{2}$	24	Season 1890 .....	36 00
Grimsthorpe and Providence Bay .....	S. Grimes .....	5	1	12 months .....	28 00
Guelph and Hamilton .....	J. Herriman .....	31 $\frac{1}{2}$	6	12 do .....	1,000 00
Hamilton and Lowville .....	T. Langton .....	19	6	12 do .....	413 50

DETAIL of all payments for Mail Transportation in Toronto Postal Division,  
&c.—*Continued.*

Name of Route.	Name of Contractor.	Distances in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Hamilton and North Barton .....	A. W. Swanzie .....	2 $\frac{1}{2}$	6	12 months .....	50 00
Hamilton and Railway Stations .....	C. Armstrong .....	1 & 1 $\frac{1}{4}$	6, 18 & 30	12 do .....	1,082 75
Hamilton and Stony Creek .....	G. Gibbons .....	7	6	12 do .....	258 32
Hamilton and Street Letter Boxes .....	J. Brundle .....		6	do (to Sept. '30, '90).	412 50
do .....	E. S. Waterman .....		6	do from do .....	409 50
Hampton and Solina .....	E. B. Cryderman .....	2 $\frac{1}{4}$	3	12 do .....	50 00
Harrisburg and Troy .....	M. O'Riley .....	4	6	12 do .....	260 00
Harrisburg and Weir .....	W. O. Williamson .....	2 $\frac{1}{2}$	3	12 do .....	45 00
Hayesland and Mill Grove .....	E. Young .....	3 $\frac{1}{2}$	6	12 do .....	136 00
Hewitt and Railway Station .....	J. B. Hewitt .....	8 $\frac{1}{2}$	6	12 do and special trip.	48 00
Humber and Weston .....	C. R. Dade .....	8	6	3 do (to June 30, '90).	75 00
do .....	M. & J. Harris .....	8	6	9 do from do .....	225 00
Humber Bay and Railway Station .....	W. T. Duck .....	150 yds	24	12 do .....	80 00
Humberstone and Railway Station .....	V. Hopf .....	1 $\frac{1}{2}$	24	12 do .....	124 80
Inglewood and Railway Station .....	J. Graham .....	1	12	9 do (to Dec. 31, '90).	39 00
do .....	J. M. Scott .....	3-20	12	3 do from do .....	13 00
International Bridge and Railway Station .....	G. Graham .....	1 $\frac{1}{4}$	24	12 do .....	150 00
Ironbridge and Thompson .....	F. Baker .....	8	2	2 do (to May 31, '90).	25 00
do .....	R. Arnill .....	8	2	10 do from do .....	108 33
Islington and Railway Station .....	T. Musson .....	1 $\frac{1}{2}$	6	12 do .....	93 90
Jackfish Bay and Railway Station .....	S. A. Eakins .....	1 $\frac{1}{2}$	12	12 do .....	130 00
Janetville and Pontypool .....	J. Chambers .....	29 r. t.	6	12 do .....	440 00
Jefferson and King Station .....	G. Harper .....	10 $\frac{1}{2}$	6	12 do .....	353 68
Jocelyn and Marksville .....	C. Young .....	12 $\frac{1}{2}$	1	12 do .....	90 00
Jordan and Pelham Union .....	H. N. Cosby .....	4	2	12 do .....	60 00
Kelso and Christie's Siding .....	D. Smith .....	1	6	12 do .....	50 00
Killarney, Manitowaning and Little Current .....	Riddell & McLaughlin .....	25 & 24	2	29 days (to April 29, '90).	89 07
do .....	J. J. Taylor .....	25 & 24 2 & 3	4	months 15 days from Nov. 16, '90).	466 28
Kilmanagh and Mona Road .....	H. McTaggart .....	3	3	12 do .....	90 00
King and Nobleton, &c. .....	D. O. Crossly .....	10 & 4 $\frac{1}{2}$	6 & 3	3 do (to June 30, '90).	92 00
do .....	W. Alcox .....	10 & 4 $\frac{1}{2}$	6 & 3	6 do from do .....	262 50
King and Railway Station .....	T. Harker .....	15	6	12 do .....	50 00
Kirkwall, Rockton and Valens .....	J. Harper .....	15 r. t.	6 & 2	12 do .....	195 00
Kleinburg and Railway Station .....	J. Cairns .....	1 $\frac{1}{2}$	12	12 do .....	150 00
L'Amaroux and Agincourt Station .....	A. Mason .....	4	3	12 do .....	100 00
Lambton Mills and Railway Station .....	J. Lynn .....	1 $\frac{1}{4}$	18	12 do .....	162 00
Langstaff and Thornhill .....	H. Horne .....	1 $\frac{1}{4}$	6	12 do .....	60 00
Lemonville and Stouffville .....	J. McConnochie .....	5 $\frac{1}{2}$	6	12 do .....	190 00
Leskard and Newcastle .....	J. M. Jackson .....	10	6	6 do (to Sept. 30, '90).	150 00
do .....	M. Jackson .....	10	6	6 do from do .....	150 00
Leskard and New Park .....	R. Fuller .....	4	2	12 do .....	52 48
Lily Lake and Manitowaning .....	H. McLaughlin .....	7	1	12 do .....	70 00
Linton and Lloydtown .....	W. Rolling .....	3 $\frac{1}{2}$	6	12 do .....	150 00
Lisgar and Trafalgar Station .....	W. J. Marshall .....	1	6	12 do .....	81 36
Little Current and Massey Station .....	W. Peters .....	26	3	5 do 8 days (broken period).	582 00
Little Current and Sheguindah .....	W. Caughill .....	8	2	Season 1890 .....	50 00
Little Rapids and Thessalon .....	J. B. Dobie .....	3	1	12 months .....	26 00
Lockton and Centreville Station .....	D. Horan, jun. .....	1 $\frac{1}{2}$	6	12 do .....	95 00
Lowbanks & Boulton Ditch Crossing .....	I. Michener .....	3 $\frac{1}{2}$	6	12 do .....	80 00
Lowville and Milton .....	M. Griffith .....	7	6	12 do .....	200 00
MacLennan and Port Finlay .....	M. MacLennan .....	2	2	Season 1890 .....	45 00
Macville and Railway Station .....	J. Archdekin .....	1	6	12 months .....	55 00
Malton and Sandhill .....	S. Scales .....	12	6	12 do .....	321 00
Malvern and Scarboro' Junction .....	R. Bell .....	23 r. t.	6	12 do .....	410 00
Manchester and Railway Station .....	J. Tennyson .....	1 $\frac{1}{4}$	12	12 do .....	95 00

DETAIL of all payments for Mail Transportation in Toronto Postal Division,  
&c.—*Continued.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Manitowaning and Providence Bay.	J. Robinson	34	2	12 months	408 00
Manitowaning and Wikwemikong.	J. B. Flamaud	6	2	1 do (from Mar. 1, '91)	9 00
Mansewood and Railway Station.	L. Wooding	1	6	12 do	50 00
Manvers Station and Ry. Station.	H. McCullough	1	6	12 do	39 11
Maple and Purpleville.	J. Rupert	13r.f.	6	12 do	219 00
Maple and Railway Station.	J. Hood	1	12	12 do	136 00
Markham and Railway Station.	F. G. Percy	1	24	12 do	156 50
Marksville and Tenby Bay.	B. P. Fuller	13	1	12 do	65 00
Marshville and Railway Station.	W. McOuet	3½	12	12 do	200 00
Massey Station and Railway Station	D. G. McDonald	20 rods	6	12 do	62 60
Meadowvale and Railway Station.	C. W. Switzer	1	12	12 do	123 43
Melville Cross and Railway Station.	H. Scott	1	6	12 do	30 00
Michipicoten River and Grasset's Station	W. Spence	55	2	12 do	288 00
Millbrook and Letter Box.	W. Williams	1	6	12 do	50 00
Millbrook and Mount Pleasant.	J. McLean	8	6	12 do	263 00
Millbrook and Railway Station	W. Vance	1	30	12 do	281 70
Milton and Railway Stations.	J. McIntosh	1 & 1	12 & 18	12 do	130 00
Mindemoya and Tehkummah	H. Cowan	27	1	12 do	140 00
Mono Mills and Mono Road Station	R. Arlow, jun.	9	6	12 do	343 00
Mono Road Station and Ry. Station	J. Judge	16	6	12 do	25 00
Montrose and Port Robinson.	A. Weststead	5	3	12 do	120 60
Mount Albion and Kymal Station.	C. Stewart	2½	3 & 6	12 do	103 00
Mulgrave and Ridgeway.	C. J. Bitner	4	3	12 do	78 00
Murilla Station and Silver Mountain	McKenzie Bros.	24	3	12 do	400 00
Murilla Station and Railway Station	J. McLean	1	12	12 do	175 00
Myrtle and Midland Station.	W. R. Derby	1	12	12 do	60 00
Nassagaweya and Campbellville Station	J. Easterbrook	5½	6	12 do	200 00
Nepigon and Railway Station.	N. Flanagan	1	6	6 do (to Sept. 30, '90)	39 25
do do	J. A. McDonald	1	6	6 do from do	39 00
Netherby and Railway Station.	A. House	1	6	3 do (to June 30, '90)	11 25
do do	J. W. Current	1	6	9 do from do	56 25
Newcastle and Orono	J. M. Jackson	5	6	6 do (to Sept. 30, '90)	77 50
do do	M. Jackson	5	6	6 do from do	77 50
Newmarket and Pine Orchard.	C. Ganton	4½	3	6 do (to Sept. 30, '90)	50 00
do do	T. Somerville	4½	3	6 do from do	44 50
Newmarket and Railway Station.	do	24	12	12 do	114 00
Niagara and Niagara Falls.	W. J. Sheppard	15	6	12 do	525 00
Niagara and Railway Station.	R. Warren	1	12	12 do	60 00
do do	do	1	6	Season 1890	10 00
Niagara and St. Catharines.	J. Abbott	12	6	12 months	448 00
Niagara Falls and Railway Station.	W. W. Woodruff	12	12	12 do	52 00
do do	do	1	6	Season 1890	8 67
Niagara Falls & Suspension Bridge, U. S.	do	1	6	12 months	84 00
Norval and Railway Station.	T. Hewson	1½	6	12 do	100 00
Oakville and Trafalgar	E. Hillmer	4	6	12 do	225 00
Oshawa and Raglan.	J. S. Yeomans	9	6	12 do	245 00
Oshawa and Street Letter Boxes.	W. H. Thomas	3	12	12 do	65 00
Palermo and Bronte Station.	A. Coffee	3	6	12 do	190 00
Parkdale—C. P. Ry. and G. T. Ry.	T. W. Todd	16	6	12 do	100 00
Peninsula Harbour and Ry. Station	H. Wilson	1	6	12 do	75 00
Pine Grove and Woodbridge.	G. Elliston	1½	6	12 do	42 00
Pointe aux Pins and Sault Ste. Marie	H. Wood	9	1	3 do (to June 30, '90)	13 75
Pontypool and Railway Station.	T. Stanton	16	12	12 do	70 00
Poplar Grove and Rydal Bank.	W. R. Smyth	13	1	12 do	104 00
Port Arthur and Railway Station.	F. S. Wilely	13	12	12 do	250 00
Port Colborne and Railway Stations	W. Armstrong	1	36	3 do (to June 30, '90)	29 25
do do	J. Saurin	1	36	9 do from do	109 50



DETAIL of all payments for Mail Transportation in Toronto Postal Division,  
&c.—Continued.

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Port Colborne Railway Station and Letter Box.....	W. Armstrong.....	20 ft.	3	do (from Jan. 1, '91)	2 50
Port Coldwell and Railway Station.	R. Jackson.....	12	3	do from do	2 50
Port Credit and Railway Station...	J. Hamilton.....	6	12	do	46 95
Port Dalhousie and Railway Station...	F. W. Smith.....	30	12	do	200 00
Port Hope and Midland Station....	C. R. Adamson.....	36	12	do	200 00
Port Hope and Ross Mount.....	S. Lill.....	7	2	do	70 00
Port Hope and Street Letter Boxes.	J. Caldwell.....	4 1/2	12	do	200 00
Port Lock and Stobie Station.....	R. Crebo.....	1 1/2	2	do (to Feb. 28, '91)	17 50
do do	P. Stobie.....	1 1/2	2	do from do	2 50
Port Maitland and Stromness.....	H. Siddall.....	2	3	do	70 00
Port Perry and Shirley.....	T. Espin.....	5	2	do	80 00
Port Perry and Railway Station...	W. M. Jamieson.....	1 1/2	18	do	74 00
Port Perry and Uxbridge.....	M. M. Hardy.....	12	6	do (to June 30, '90)	90 75
do do	J. H. Wegg.....	12	6	do from do	270 00
Port Robinson and Railway Station	J. McCoppen.....	24	12	do	140 00
Prince Albert and Railway Station.	C. Fallis.....	4 1/2	12	do	80 00
Richard's Landing and Sea Gull.....	W. Young.....	6	1	do	55 00
Richmond Hill and Railway Station	W. R. Proctor.....	3 3/4	12	do	237 85
Richmond Hill and Toronto.....	J. Palmer.....	16	6	do	1 00
Ridgeway and Railway Station.....	P. W. Anthony.....	1 1/2	12	do	75 12
Rockside and Terra Cotta.....	I. Harber.....	3 1/2	2	do	69 00
Rouge Hill and Toronto.....	R. H. Crew.....	17	6	do	399 00
St. Catharines and Street Letter Boxes.....	J. J. Richardson.....	1	12	do	323 00
St. Catharines and Welland Station	M. Iveson.....	1	24	do	250 40
Sault Ste. Marie and Sault Ste. Marie, U.S.....	M. C. Pim.....	1 1/2	6	do	150 00
Sault Ste. Marie & Railway Station	do	1 1/2	12	do	187 80
Schreiber and Railway Station.....	J. E. Walker.....	200 yds	12	do	75 00
Scotch Block and Railway Station...	J. McKennzie.....	1	6	do	78 00
Seagrave and Railway Station.....	E. Wanes.....	1 1/2	6	do	59 88
Sheridan and Cooksville Station....	W. H. Falconer.....	8	6	do	279 00
Skerkston and Railway Station.....	B. F. Sherk.....	2 1/2	12	do	75 00
Shrubmount and Vivian.....	F. Stevens.....	2 1/2	3	do	65 00
Siloam and Uxbridge.....	J. Smith.....	16 r.t.	3	do	146 00
Sinclairville and Glanford Station...	J. R. Wilson.....	13	3	do (to Jan. 31, '91)	167 90
Smithville and Wellandport.....	J. Wilson.....	9	6	do (to June 30, '90)	67 25
do do	B. Atkinson.....	9	6	do from do	186 75
Snyder and Railway Station.....	T. Snyder.....	1 1/2	6	do	125 00
South Bay Mouth and Tehkummah.	S. Sloan.....	8	1	do (from Jan. 1, '91)	25 50
Sowerby and Dayton Station.....	G. Hendry.....	6	2	do	112 75
Spanish River Station & Ry. Station	W. Kennedy.....	1 1/2	6	do (to Sept. 30, '90)	30 00
do do	M. Donovan.....	1 1/2	6	do from do	30 00
Stevensville and Railway Station...	C. Tytherleigh.....	15 r.t.	12	do	80 00
Stoney Creek and Woodburn.....	J. Cowan.....	3	12	do	149 00
Stouffville and Railway Station.....	M. Yake.....	30	12	do	78 95
Streetsville and Railway Station...	J. Johnston, sen.....	30	9	do (to Dec. 31, '90)	93 75
do do	T. W. Robinson.....	30	3	do from do	30 00
Stromness and Railway Station.....	H. Siddall.....	2	12	do	120 00
Sudbury and Railway Station.....	S. Fournier.....	12	12	do	187 80
Summerville and Cooksville Station.	P. McLaughlin.....	6	6	do	225 00
Swansea and Railway Station.....	J. Worthington.....	100 yds	24	do	78 00
Tehkummah and The Slash.....	J. I. Young.....	4	1	do (to Dec. 31, '90)	37 50
Thessalon and Railway Station.....	McCrea & Moore.....	3	12	do (to June 30, '90)	93 60
do do	J. Glancy.....	3	12	do from do	206 25
Thessalon and Wharnccliffe.....	W. Taggart.....	17	1	do	120 00
Thompson and Railway Station.....	R. Tyner.....	30 ft.	6	do	25 00
Thornhill and Railway Station.....	J. T. B. Lindsay.....	3	12	do	219 10
Thornhill and Toronto.....	J. Thompson.....	12	6	do	250 00
Thorold and Railway Station.....	J. Dale.....	24	12	do	187 80

DETAIL of all payments for Mail Transportation in Toronto Postal Division,  
&c.—*Concluded.*

Name of Route.	Name of Contractor.	Distance in Miles.	No. of Trips per Week.	Period.	Amount.
					\$ cts.
Toronto and Branch Post Offices...	R. Bond .....			12 months .....	2,450 00
Toronto and Railway Stations .....	F. Middleton...	1	24 & 30	12 do (less fine) .....	861 41
do do .....	J. R. Hendry...	$\frac{1}{2}$ & 1	26 & 48	12 do (less fines) .....	942 70
do do .....	S. Saulter .....			Special trip .....	0 25
Unionville and Railway Station...	M. R. Hemingway .....				
		$\frac{1}{4}$	24	12 months .....	81 12
Uxbridge and Railway Station .....	J. Kimmerly .....	$\frac{1}{4}$	24	12 do .....	90 00
Uxbridge and Victoria Corners .....	J. Wegg .....	19 r.t.	3	12 do .....	145 00
Vivian and Railway Station..	N. L. McCormack .....	$\frac{1}{8}$	12	12 do .....	60 00
Walford Station and Ry. Station...	A. G. Walford .....	$\frac{1}{8}$	6	12 do .....	46 95
Webbwood and Railway Station .....	J. McLandress .....	$\frac{1}{8}$	6	1 do (to April 30, '90) .....	6 50
do do .....	G. McLandress .....	$\frac{1}{8}$	6	11 do from do .....	71 75
Welland and Railway Station .....	J. McQueen .....	$\frac{1}{4}$	12	12 do .....	100 16
Welland and Street Letter Boxes .....	G. H. Burgar .....	500 yds	18	12 do .....	80 00
Welland and Wellandport .....	L. Durham .....	15	6	12 do .....	395 00
Welland and Welland Station .....	O. H. Garner .....	$\frac{3}{4}$	24	12 do .....	175 28
Wesleyville and Railway Station .....	J. Barrowclough .....	$\frac{1}{2}$	6	12 do .....	93 90
West Toronto Junction and Railway Station .....	J. S. Kirkwood .....	$\frac{1}{4}$	24	12 do .....	100 00
Whitby and Railway Station .....	J. Scott .....	$\frac{1}{2}$	18	12 do .....	103 28
Whitefish and Railway Station .....	F. Summerby .....	$\frac{1}{4}$	6	12 do .....	41 57
Woodbridge and Railway Station .....	G. Elliston .....	$\frac{1}{4}$	24	12 do .....	72 00
Zimmerman and Burlington Station	C. F. Cartwright .....	9	6	12 do .....	280 00
Suspension Bridge Tolls..	W. G. Swan, Superintendent .....			12 do .....	40 00
				Total .....	\$52,739 20

WILLIAM WHITE,  
Deputy Postmaster-General.

W. H. SMITHSON,  
Accountant.

NOTE.—The statement of expenditure for conveyance of mails by railways, steamboats and sailing vessels, making and repairing mail bags, salaries, travelling expenses, stationery, printing and advertising and miscellaneous disbursements, heretofore published in the Postmaster General's Report, will now be found in the Auditor General's Report only.

## PROVINCE OF ONTARIO.

STATEMENT showing the Accounting Offices in operation; the gross Postal Revenue; the Number and Amount of Money Orders issued and paid; the Amount of Commission thereon; and the Compensation, Salary and Allowances paid to the Postmaster at each Office respectively, during the Year ended 30th June, 1891.

Name of Office.	County.	Gross Postal Revenue.		Number of Money Orders Issued.	Total Amount of Money Orders Issued.		Total Commission received from Public.		Total Amount of Money Orders Paid.		Com- pen- sa- tion Paid to Post- masters on M. O. business.		Com- pen- sa- tion Paid to Post- masters on S. B. business.		Salary.		Forward Allowance.		Allowance towards Rent, Fuel and Light.	
		\$	cts.		\$	cts.	%	cts.	\$	cts.	%	cts.	\$	cts.	%	cts.				
Aberfoyle.....	Wellington.....	173	52	150	1,626	92	12	57	237	73	4	13			65	00				
Acton.....	Halton.....	1,947	11	787	9,238	66	71	38	4,693	39	24	13	8	79	670	00			80	00
Adolphustown.....	Lennox.....	213	25	125	1,612	34	11	11	126	83	4	02			60	00	8	00		
Ailsa Craig.....	Middlesex.....	1,014	66	709	6,339	59	54	46	2,270	75	17	10	3	59	400	00			40	00
Albion.....	Cardwell.....	1,271	64	440	14,846	34	89	20	4,546	88	38	18	66	10	408	00	36	00	60	00
Aldboro'.....	Elgin.....	81	33	45	497	55	3	28	24	61	1	28			30	00				
Alexandria.....	Glenagarry.....	2,371	07	453	7,437	04	53	64	8,192	42	27	71	60	51	640	00	120	00	80	00
Algoma Mills.....	Algoma.....	366	00	218	6,502	03	42	14	991	56	16	67	2	76	216	00			40	00
Allandale.....	Simcoe.....	1,218	49	461	4,840	62	39	90	1,087	63	12	57	13	94	150	00	10	00		
Allenford.....	Bruce.....	407	49	435	6,158	93	41	07	745	65	15	94			80	00				
Allensville.....	Muskoka & P. Sound	244	88	214	2,376	79	16	48	651	71	6	25	23	76	720	00	8	00	120	00
Alliston.....	Simcoe.....	2,616	36	787	7,787	04	58	48	4,086	73	21	00			120	00				
Alma.....	Wellington.....	442	49	221	1,529	21	13	50	501	32	3	90			1,270	00	57	00	200	00
Almonte.....	Lennox.....	4,324	59	1,793	17,425	01	147	83	9,617	41	48	37	63	56	230	00				
Alton.....	Cardwell.....	615	81	350	4,523	53	34	22	1,454	31	11	54	0	96	480	00			60	00
Amvinston.....	Lambton.....	1,464	97	713	8,037	18	62	05	2,957	06	21	28	25	10	480	00				
Amherstburg.....	Essex.....	2,001	02	1,408	17,471	90	138	03	7,121	98	49	71	45	30	710	00	62	51		
Ancaster.....	Brant.....	666	29	508	7,737	70	55	44	1,268	13	19	80	2	24	260	00				
Angus.....	Simcoe.....	473	97	145	3,202	64	20	85	907	55	8	51	4	51	213	00	12	00		
Appin.....	Middlesex.....	493	60	359	6,589	28	46	19	669	77	16	92	2	99	180	00				
Arkwright.....	Lambton.....	938	41	842	12,309	23	92	59	3,300	04	32	69	16	92	354	00			40	00
Arnprior.....	Bruce.....	183	12	70	587	35	4	72	161	88	1	53			80	00	4	00		
Arthur.....	Renfrew ..	3,500	98	1,753	23,301	94	178	04	9,256	46	63	16	23	17	1,040	00	115	00	160	00
Arva.....	Wellington.....	2,037	60	1,152	17,874	62	116	33	8,514	02	48	48	58	27	556	00	28	00	80	00
Ashworth.....	Middlesex.....	127	05	101	1,335	07	10	09	292	95	3	37			60	00	24	00		
Athens.....	Simcoe.....	105	72	110	1,325	09	7	66	589	33	3	37	0	70	40	00			60	00
Auburn.....	Leeds.....	1,556	71	560	7,199	57	53	24	2,825	62	18	77	0	01	500	00	12	00		
Aultsville.....	Huron.....	377	80	580	13,696	53	85	32	1,065	85	34	47			150	00				
Aurora.....	Stormont.....	662	78	319	3,012	81	23	39	1,395	07	8	56	1	00	240	00			8	00
	York.....	2,225	54	764	8,967	99	62	29	14,433	65	24	04	16	36	720	00	36	00	120	00





## STATEMENT showing the Accounting Offices in Operation, &amp;c., in Ontario—Continued.

Name of Office.	County.	Gross Postal Revenue.	Number of Money Orders Issued.	Total Amount of Money Orders Issued.	Total Commission received from Public.	Total Amount of Money Orders Paid.	Compensation Paid to Post-masters on M.O. business.	Compensation Paid to Post-masters on S.B. business.	Salary.	Forward Allowance.	Allowance towards Rent, Fuel and Light.
		\$ cts.		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Brougham .....	Ontario.	466 00	106	2,612 98	18 61	682 24	6 80	0 35	208 00	24 00	
Brussels .....	Huron.	2,559 41	1,837	23,230 97	163 14	7,550 50	61 36	38 65	800 00	55 00	140 00
Burford .....	Brant.	654 15	667	12,934 40	86 87	3,459 32	34 13	4 44	230 00	22 50	
Burk's Falls .....	Muskoka & P. Sound	1,145 70	462	7,011 40	50 83	3,302 63	19 06		380 00	40 00	
Burlington .....	Halton.	1,208 65	590	6,220 63	52 64	3,853 21	17 29	8 68	420 00	12 00	40 00
Byng Inlet, North.	Muskoka & P. Sound	237 43	272	7,114 36	44 22	928 21	17 82	5 37	96 00		
+Cache Bay .....	Nipissing.	363 78	51	513 88	3 71		1 29		172 50		
Castorville .....	Wentworth.	133 74	61	1,391 98	8 15	117 00	3 48		50 00		
Caledon .....	Cardwell.	407 89	203	4,117 94	26 99	879 43	10 54		150 00		
Caletonia .....	Haldimand.	1,426 20	719	16,408 30	72 40	3,518 03	26 95		510 00	50 00	60 00
Callender .....	Muskoka & P. Sound	271 42	109	742 45	5 84	303 85	2 11		70 00	10 00	
Cambray .....	Victoria.	374 65	280	3,658 10	24 92	812 53	9 17	2 74	132 00		
Camden, East.	Addington.	409 42	356	4,333 77	30 63	1,069 12	11 00		164 00	31 00	
Canlachie .....	Lambton.	473 71	150	1,439 60	11 14	2,538 72	4 36		160 00	10 00	
Campbellford .....	Northumberland.	3,417 45	1,811	21,537 91	163 36	6,848 88	57 94	25 12	820 00		120 00
Campbellville .....	Halton.	346 78	335	4,070 78	28 93	554 75	10 36		120 00		
Canfield .....	Haldimand.	311 94	367	4,785 19	30 53	314 81	12 00	7 26	121 00	32 00	
Canington .....	Ontario.	1,742 84	758	8,273 72	59 08	5,906 81	21 43	7 08	550 00	48 00	80 00
Cardinal .....	Grenville.	1,286 80	621	10,934 91	81 73	2,033 15	29 02	31 04	440 00	16 00	60 00
Cargill .....	Bruce.	384 27	243	2,306 61	18 35	3,297 71	7 19	2 94	136 00		
*Carleton Place.	Lanark.	4,530 12	3,036	19,731 48	158 37	10,675 70	51 97	68 52	1,100 00		160 00
*Carleton St. (Toronto)	York.			33,554 72	368 61	4,327 55	85 62	130 50			
Castleton .....	Northumberland.	435 15	433	6,355 65	43 64	685 85	16 15		166 00		
Cayuga .....	Haldimand.	1,186 15	1,020	11,441 91	83 88	5,077 80	30 55	21 74	500 00	42 00	60 00
Cedar Dale .....	Ontario.	436 52	127	1,290 71	12 69	327 24	3 56		228 00		
Chapman .....	Algoma.	1,142 11	508	10,512 52	81 48	1,017 76	26 65	40 31	320 00		40 00
Charing Cross.	Kent.	503 48	89	1,252 54	8 95	252 92	3 40		216 00	60 00	
Chatham .....	do.	13,496 63	4,346	44,427 75	405 60	40,053 43	131 29	97 63	3,300 00	240 00	
Chatsworth .....	Grey.	730 84	398	7,020 41	48 88	3,977 28	19 47		240 00	48 00	
Chesley .....	Bruce.	2,449 12	937	7,727 57	63 33	10,585 09	23 80	7 99	700 00	8 00	120 00
Chesville .....	Dundas.	1,257 32	257	4,071 01	33 89	3,802 91	12 84		29 74	460 00	40 00
Chippawa .....	Welland.	622 54	153	1,499 54	13 57	2,501 25	6 90	14 66	315 00		20 00
Claudeboye .....	Middlesex.	236 99	71	1,575 07	10 68	714 07	4 02		100 00		
Claremont .....	Ontario.	632 16	280	8,193 79	53 24	1,731 64	20 85	3 35	200 00		
Clarence .....	Russell.	425 06	120	2,169 95	17 49	1,093 18	6 25		140 00	24 00	
Clarke .....	Durham.	389 52	179	2,320 82	15 41	448 00	6 38		126 00	36 00	

Clarksburg	Grey	805 55	598	8,820 18	63 11	5,516 49	24 33	55 13	300 00	60 00	
Clearville	Elgin	232 30	308	4,122 09	26 17	733 61	10 45		80 00		
Clifford	Wellington	1,093 38	544	7,186 26	52 74	5,189 88	19 89	17 64	420 00	60 00	50 00
Clinton	Huron	4,603 30	1,426	17,297 02	142 24	17,555 37	48 48	110 87	1,272 00	150 00	200 00
Cobden	Renfrew	1,017 43	287	4,438 25	29 65	1,646 52	11 47	9 51	340 00		40 00
Cobourg	Northumberland	6,714 43	2,284	24,160 08	213 43	22,388 83	71 49	24 31	1,824 00	240 00	
Colborne	do	2,816 58	1,617	16,451 77	125 99	14,293 46	42 98	2 91	800 00	240 00	120 00
Coldwater	Simcoe	904 07	674	9,350 17	64 91	2,354 86	24 60	10 65	332 00	24 00	40 00
Coleman	York	634 42	234	3,624 31	26 63	1,291 32	10 35	8 30	140 00		
Collingwood	Simcoe	6,187 89	2,455	19,329 77	159 70	31,305 86	61 32	44 07	1,550 00	280 00	240 00
Colpo's Bay	Bruce	121 10	135	1,731 34	13 41	694 48	5 24		50 00	8 00	
Columbus	Ontario	287 34	92	2,231 78	13 70	1,361 93	5 90		108 00		
Comber	Essex	1,106 40	113	2,315 89	13 76	788 28	5 82		400 00	6 00	40 00
Conestogo	Waterloo	230 09	250	2,702 85	20 82	549 25	6 86		84 00		
Consecon	Prince Edward	469 59	462	4,753 04	34 11	662 70	12 44	1 29	200 00	12 00	
Cookstown	Simcoe	983 16	310	5,356 43	36 51	1,574 54	13 53	14 40	336 00	12 00	40 00
Cooksville	Peel	318 91	104	1,735 15	12 16	1,191 02	4 46		120 00		
Corinth	Elgin	232 31	277	3,674 05	23 60	684 10	9 35		84 00		
Corwall	Stormont	8,173 52	1,932	24,003 09	205 04	25,302 82	74 84	112 05	1,950 00	115 00	
Corunna	Lambton	257 08	206	2,444 00	18 37	1,126 54	7 39		100 00		
Courtthrust	do	662 23	337	4,639 58	32 89	3,738 24	14 15	0 79	234 00	24 00	
Craighurst	Simcoe	212 53	30	772 02	4 98	198 03	1 95		72 00		
Crediton	Middlesex	681 13	246	4,515 67	35 36	1,255 49	11 41	15 41	240 00	24 00	40 00
Cremore	Simcoe	1,205 28	859	11,193 68	76 00	3,740 19	28 78	24 02	412 00		
Crysler	Stormont	376 77	318	12,282 32	77 26	7,077 83	38 90		150 00		
Cumberland	Cumberland	574 98	236	4,154 89	30 93	1,304 04	10 79	2 22	180 00		
Deer Park	Russell	387 77	151	1,526 09	13 92	424 05	3 95	5 17	100 00		
Delaware	York	473 62	450	6,302 10	46 23	1,280 49	16 47	5 79	206 00		
Delhi	Middlesex	1,293 58	967	10,123 33	78 31	3,528 75	26 40	1 29	400 00	25 00	40 00
Delta	Norfolk	833 00	616	10,554 99	70 71	1,547 36	26 94	2 72	276 00		
Desboro	Leeds	384 83	438	7,419 63	47 89	833 47	19 70		108 00		100 00
Deseronto	Grey	4,234 94	1,582	15,305 95	126 05	4,948 94	41 26	17 78	1,100 00		
Dickinson's Landing	Hastings	375 37	171	4,101 77	26 11	881 73	10 77		136 00		
Dorchester Station	Stormont	490 17	369	3,383 61	27 85	2,909 43	8 83		180 00	70 00	
Dovercourt	Middlesex	234 09	60	1,048 89	9 48	173 93	2 88		76 00		
Dresden	York	1,419 33	615	5,412 56	41 94	3,513 55	13 96		500 00	16 00	60 00
Dresden	Wellington	2,479 66	1,845	23,036 87	174 64	6,251 24	60 20	22 91	660 00	24 00	110 00
Drumbo	Bothwell	952 81	560	7,587 23	53 63	1,952 66	20 20	2 43	348 00	16 00	40 00
Duart	Brant	357 91	63	7,412 72	4 30	182 24	1 04		126 00		
Dublin	Elgin	652 26	164	6,380 05	37 27	1,839 69	18 38		240 00	32 00	
Dunblain	Perth	169 46	22	5,601 57	4 12	391 36	1 70	1 09	67 00		
Dunburch	Ontario	385 19	286	5,370 91	34 07	573 29	14 11		140 00	10 00	
Dundas & P. Sound	Muskoka & P. Sound	1,422 98	796	14,482 74	96 48	4,476 14	36 99		460 00	36 00	60 00
Dundalk	Grey	3,837 32	1,440	13,547 22	120 18	10,758 34	41 41	86 13	1,120 00	120 00	
Dundas	Wentworth		1,011	10,871 10	114 08	2,551 96	28 53	19 03			
*Dundas St. (Toronto)	York	496 25									
Dungannon	Huron	3,101 97	1,653	9,161 57	56 06	1,985 93	23 74	13 82	170 00		
Dunnville	Monck			17,377 74	135 64	14,538 23	46 80	24 36	880 00	72 00	120 00
Dunvegan	Glenarry	300 97	137	2,555 60	18 33	1,521 70	8 57		100 00		
Durham	Grey	2,103 42	931	15,540 10	105 67	6,652 63	42 41	31 51	680 00	110 00	100 00

+ Opened, 2nd January, 1891.

\* Salaries, &amp;c., entered in Auditor General's Report.



## STATEMENT showing the Accounting Offices in operation, &amp;c., in Ontario—Continued.

Name of Office.	County.	Gross Postal Revenue.	Number of Money Orders Issued.	Total Amount of Money Orders Issued.	Total Commission received from Public.	Total Amount of Money Orders Paid.	Com- pen- sation Paid to Post- masters on M. O. business.	Com- pen- sation Paid to Post- masters on S. B. business.	Salary.	Forward Allowance	Allowance towards Rent, Fuel and Light.
		\$ cts.		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Dutton .....	Elgin .....	1,515 36	724	11,145 02	72 12	3,190 16	28 92	9 33	460 10	...	60 00
Eganville .....	Renfrew .....	1,303 37	387	13,104 83	83 39	2,563 25	34 24	16 17	460 00	70 00	40 00
Elmira .....	Waterloo .....	964 27	625	5,547 98	48 27	2,910 27	15 54	2 45	288 00	...	40 00
Elmhurst .....	Simcoe .....	1,006 46	248	4,259 78	28 78	767 52	10 67	0 16	288 00	...	...
Elmwood .....	Bruce .....	1,595 76	309	4,280 91	31 69	1,841 89	11 78	0 05	200 00	20 00	...
Elora .....	Wellington .....	2,204 53	1,394	17,100 96	131 63	8,478 60	45 57	89 93	672 00	100 00	120 00
Enniskillen .....	Oxford .....	862 71	656	8,202 28	63 86	4,300 42	22 16	4 48	320 00	47 50	40 00
Enniskillen & P. Sound .....	Muskoka .....	814 97	302	5,983 04	40 23	2,103 91	16 58	5 72	152 00	16 00	...
Enterprise .....	Addington .....	477 72	145	2,724 97	18 88	240 99	7 04	...	144 00	12 00	...
Erin .....	Wellington .....	1,106 39	764	13,999 05	99 12	2,828 34	36 30	52 60	360 00	12 00	40 00
Essex Centre .....	Essex .....	2,936 12	1,795	21,129 83	153 58	5,492 57	54 48	23 16	900 00	135 00	100 00
Essex .....	Middlesex .....	2,250 65	1,449	15,213 47	113 88	9,201 56	40 23	60 32	680 00	84 00	110 00
Exeter .....	Victoria .....	1,832 03	744	13,303 49	88 94	4,045 62	34 68	23 67	480 00	6 00	60 00
Fenelon Falls .....	Wellington .....	2,922 50	1,694	20,021 04	146 79	9,129 62	52 59	27 49	820 00	180 00	120 00
Fergus .....	Elgin .....	799 81	231	3,478 46	25 28	2,575 72	9 18	4 78	260 00	...	...
Fingert .....	Grey .....	1,015 58	799	12,362 06	82 59	2,745 35	31 38	...	400 00	70 00	40 00
Fletcher .....	Middlesex .....	708 15	619	9,210 12	65 60	3,576 16	25 07	...	270 00	...	...
Florence .....	Welland .....	493 43	315	3,821 34	30 35	2,100 79	10 75	5 83	180 00	...	...
Fonthill .....	Huron .....	607 51	426	9,801 85	61 47	2,624 98	24 53	0 92	230 00	16 00	...
Fordwich .....	Lambton .....	2,511 82	1,422	10,812 63	93 56	11,062 80	32 46	4 59	780 00	16 00	120 00
Forest .....	Bruce .....	288 71	228	2,540 37	18 22	981 19	7 01	...	119 00	...	...
Fornosa .....	Welland .....	943 79	906	5,923 69	41 80	2,704 23	16 28	20 44	310 93	...	38 37
Fort Erie .....	Algonquin .....	783 49	767	13,101 05	106 59	3,654 75	33 98	25 17	390 00	...	40 00
Fort William, West .....	Hastings .....	616 28	546	8,079 21	56 20	1,235 51	20 78	1 20	250 00	...	...
Frankford .....	Wentworth .....	285 99	175	2,325 45	15 69	1,407 01	5 94	...	90 00	8 00	...
Freelon .....	Haltoun .....	403 75	83	1,114 32	9 27	1,001 65	3 08	...	144 00	...	...
French River .....	Muskoka & P. Sound .....	173 32	42	1,060 25	6 58	119 25	2 65	...	72 00	...	...
Galt .....	Waterloo .....	11,505 54	4,052	38,887 34	342 83	50,643 17	113 60	111 71	2,700 00	60 00	...
Gananoque .....	Leeds .....	5,054 72	2,115	22,834 06	202 67	12,421 34	61 41	34 00	1,320 00	24 00	120 00
Georgetown .....	Haltoun .....	1,372	1,372	15,231 62	126 19	7,041 13	40 35	45 73	808 00	108 00	120 00
Glennville .....	Bruce .....	395 06	191	2,436 89	17 38	1,453 74	6 73	...	140 00	...	...
Glenallan .....	Wellington .....	418 23	297	6,106 45	38 17	748 34	15 31	2 42	150 00	...	...
Glencoe .....	Middlesex .....	2,397 64	1,241	15,562 36	115 85	6,623 24	40 16	15 39	710 00	16 50	120 00
Goderich .....	Huron .....	5,629 94	3,178	34,998 12	282 45	20,248 28	101 09	67 09	1,600 00	160 00	81 69
Gore Bay .....	Algonquin .....	829 72	1,158	29,488 75	183 02	8,437 59	76 45	...	360 00	...	...
Gorrie .....	Huron .....	672 96	451	6,929 53	47 03	2,040 13	17 53	6 00	300 00	...	...







Manotie.....	549 66	351	9,272 99	56 98	554 86	23 90	17 28	192 00
Maple.....	378 33	92	2,577 55	19 12	1,130 72	6 57	9 28	140 00
Markdale.....	1,668 18	835	11,969 65	79 70	7,639 09	31 99	15 78	520 00
Markham.....	1,875 76	644	8,216 11	65 44	8,353 66	22 05	6 44	560 00
Marlbank.....	156 19	20	174 03	1 13	.....	0 44	.....	40 00
Marlborough.....	881 09	396	4,435 41	35 85	1,939 87	14 00	1 59	340 00
Marmora.....	297 81	129	1,605 85	10 34	234 99	4 01	.....	96 00
Marshallville.....	2,224 48	530	12,262 07	81 88	2,507 25	31 87	17 64	850 00
Maxwell.....	332 32	410	8,469 38	55 35	1,879 80	21 67	.....	100 00
McKellar.....	274 74	252	3,783 22	25 67	168 87	9 45	.....	148 00
Meadowdale.....	208 81	125	1,510 37	12 83	485 62	3 78	.....	84 00
Meaford.....	3,011 79	2,216	23,843 24	173 71	17,969 75	65 96	37 54	890 00
Melbourne.....	520 83	302	3,846 95	27 31	963 72	9 79	.....	168 00
Merrickville.....	1,537 57	733	11,190 02	81 54	6,023 66	30 03	33 20	540 00
Merritt.....	1,082 34	573	6,178 09	54 59	2,566 27	15 97	14 90	360 00
Metcalfe.....	635 28	336	7,806 32	49 60	1,521 11	20 45	18 40	220 00
Middleville.....	178 90	131	1,125 73	9 42	409 99	2 84	16 08	66 00
Midland.....	2,507 54	1,183	12,672 23	95 15	7,075 08	33 56	14 83	720 00
Midway.....	1,009 10	569	8,337 16	56 83	4,416 30	24 28	1 00	370 00
Millbank.....	375 22	395	7,239 38	50 35	1,069 68	18 36	0 82	155 00
Millbrook.....	1,707 48	738	5,832 33	49 26	7,031 37	16 14	16 37	575 00
Millie Roches.....	490 25	300	5,371 27	38 22	528 98	13 65	6 93	132 00
Milton West.....	2,508 46	1,711	16,724 20	130 96	8,511 89	45 06	25 88	700 00
Milverton.....	826 68	404	5,720 35	42 05	1,690 68	14 87	6 83	280 00
Minden.....	810 12	319	4,314 67	32 43	2,337 11	11 65	5 98	312 00
Mitchell.....	3,247 26	1,382	16,098 92	127 22	11,349 83	47 79	50 45	950 00
Mohawk.....	309 50	144	1,374 26	11 09	530 46	3 56	.....	160 00
Monro Mills.....	242 23	106	1,796 49	11 91	451 33	4 56	.....	114 00
Moore.....	332 96	138	1,241 72	10 22	874 92	3 83	0 48	144 00
Moorefield.....	683 24	543	5,519 07	38 87	1,771 33	14 51	.....	216 00
Morpeth.....	462 94	287	3,603 45	34 07	747 43	9 20	0 65	168 00
Morrisburg.....	3,901 82	1,776	19,141 72	155 17	9,315 70	51 57	18 27	1,100 00
Morrison.....	271 04	241	3,857 44	26 50	1,921 38	10 36	.....	100 00
Mount Albert.....	714 85	502	8,130 02	54 76	2,335 51	20 65	5 16	240 00
Mount Brydges.....	565 28	500	7,540 35	54 39	966 96	19 47	3 77	120 00
Mount Elgin.....	294 96	289	2,514 45	21 61	422 08	6 47	.....	210 00
Mount Forest.....	3,963 16	2,586	30,369 53	216 21	17,186 73	84 13	25 85	1,040 00
Nanticoke.....	199 95	124	2,697 28	16 19	17,357 82	6 78	.....	100 00
Napanee.....	6,061 26	2,315	22,818 36	186 41	21,375 80	64 81	74 28	1,740 00
Napier.....	213 56	122	1,374 20	8 90	1,026 80	3 51	.....	104 00
Nassagaweya.....	218 09	408	6,005 12	41 02	659 38	15 03	1 34	96 00
Nepigon.....	244 78	132	2,142 30	15 69	208 84	5 56	.....	72 00
Neustadt.....	804 80	278	4,501 05	40 86	1,319 48	11 53	9 08	240 00
Newboro'.....	875 67	283	6,734 22	49 94	4,820 34	18 73	24 33	348 00
Newburgh.....	600 65	403	5,420 64	39 73	1,513 71	13 77	13 50	250 00
Newbury.....	662 89	431	4,898 08	38 30	1,448 47	12 39	17 07	250 00
Newcastle.....	1,154 70	837	12,533 85	83 82	4,248 71	32 80	3 26	450 00
New Dundee.....	1,429 86	179	2,186 69	19 70	1,017 19	6 14	6 68	300 00
New Edinburgh.....	430 53	144	3,184 04	23 67	659 74	8 91	8 14	160 00

\* Opened 1st April, 1891.

\* Satisfy, &amp;c., entered in Auditor General's Report.

\* Opened 1st October, 1890.

## STATEMENT showing the Accounting Offices in operation, &amp;c., in Ontario—Continued.

Name of Office.	County.	Gross Postal Revenue.	Number of Money Orders Issued.	Total Amount of Money Orders Issued.		Total Commission received from Public.	Total Amount of Money Orders Paid.		Compensation Paid to Post-masters on business.	Compensation Paid to Post-masters on S. B. business.	Salary.	Forward Allowance	Allowance towards Rent, Fuel and Light.
				\$	cts.		\$	cts.			\$	cts.	
New Germany	Waterloo.	114 30	156	2,443	06	20 07	939	35	6 11		52 00		
New Hamburg	Waterloo.	1,747 08	526	5,926	34	49 15	5,463	48	16 31	4 12	610 00	24 00	90 00
Newmarket.	Ontario	3,533 64	1,413	14,563	29	121 24	12,102	43	40 32	42 01	940 00	120 00	150 00
Niagara	Lincoln & Niagara.	2,076 29	958	11,019	49	86 75	5,739	12	31 41	14 98	600 00	72 00	90 00
Niagara Falls	Welland	3,866 39	1,207	13,086	06	110 29	8,334	12	38 89	48 06	1,370 00	200 00	
Niagara Falls South.	Welland	1,300 85	902	12,316	15	92 59	3,870	34	25 72	530 00	500 00		60 00
Norblaton.	York	244 07	118	2,161	97	14 51	661	99	5 59	7 00	84 00	4 00	
Norland.	Victoria	231 10	35	3,334	56	2 46	843	01	0 85		84 00		
North Augusta.	Grenville.	462 07	324	8,339	92	50 86	1,657	47	23 04	7 01	144 00		
North Bay.	Nipissing	3,328 59	1,135	20,547	94	153 00	7,006	94	54 62	54 86	780 00	8 00	120 00
North Gower.	Carleton	514 75	146	3,812	10	26 70	2,475	99	10 48	14 58	240 00		
North Port.	Prince Edward.	260 83	266	4,973	87	35 20	606	30	12 81	2 23	132 00		
Norval.	Halton.	411 37	218	2,658	15	19 21	908	77	6 81		150 00		
Norwich	Oxford	2,425 37	1,782	17,773	70	140 67	8,730	46	46 77	17 98	672 00		110 00
Norwood	Peterboro'	2,218 33	770	9,762	13	73 02	5,414	03	26 12	15 82	580 00	48 00	100 00
Oakland.	Oxford.	1,748 25	72	1,743	27	12 13	81	20	4 42		64 00	24 00	
Oakville	Halton.	2,399 81	1,185	16,115	03	123 06	9,616	68	44 19	29 75	700 00	32 00	100 00
Oakwood	Victoria	461 54	308	3,550	86	26 62	877	28	8 88		180 00		
Odessa	Lennox	469 29	338	6,364	76	42 07	3,161	01	16 59	11 88	186 00	72 00	
Olin Springs.	Lambton	1,470 06	590	9,720	49	69 08	3,800	91	26 50	5 80	384 00		40 00
Onenice	Victoria.	1,173 07	500	10,204	02	68 95	2,428	09	26 21	15 81	380 00	16 00	40 00
Orangeville.	Wellington.	5,125 77	1,585	17,683	93	130 20	16,459	07	47 33	31 09	1,236 00	72 00	
Orillia.	Simcoe.	7,907 22	2,334	25,986	01	211 93	20,188	50	80 00	65 90	1,960 00	150 00	340 00
Orono.	Durham	1,002 20	716	8,093	51	59 35	4,151	24	20 85	22 89	390 00		40 00
Orwell.	Elgin.	133 93	90	3,997	06	7 09	54	00	2 49		42 00	6 00	
Oscola.	Renfrew	380 48	115	2,945	28	17 71	748	86	7 82	3 81	150 00	8 00	
Oshawa.	Ontario.	5,492 37	2,016	17,066	37	152 86	29,188	12	48 68	28 32	1,490 00	80 00	240 00
*Ottawa.	Carleton.	49,351 93	12,422	184,532	41	1,664 51	190,690	04					
Otterville.	Oxford.	1,098 74	315	2,076	92	18 80	2,662	05	6 41	2 16	340 00		40 00
Owen Sound	Grey.	9,696 54	4,155	43,298	65	356 84	54,029	98			2,420 00	265 00	360 00
Paisley	Bruce	2,688 98	745	8,315	90	63 48	10,204	09	23 42	14 47	840 00	90 00	140 00
Pakenham	Lanark.	1,186 71	518	9,310	95	61 88	1,569	24	23 95	7 03	400 00	24 00	40 00
Pakenham.	Halton.	216 55	276	3,602	03	26 55	1,567	99	9 22	1 68	80 00		
Palmerston.	Wellington.	1,214	1,214	10,912	70	86 00	4,787	43	29 03	10 29	660 00	80 00	110 00
Paris.	Wellington.	3,743 95	1,634	15,107	36	127 39	8,507	08	42 00	34 66	1,225 00		180 00
Paris Station.	do	1,124 70	336	3,752	44	29 24	689	49	9 67	2 17	360 00	72 50	40 00







## STATEMENT showing the Accounting Offices in operation, &amp;c., in Ontario—Continued.

Name of Office.	County.	Gross Postal Revenue.	Number of Money Orders Issued.	Total Amount of Money Orders Issued.	Total Commission received from Public.	Total Amount of Money Orders Paid.	Compensation Paid masters on M. O. business.	Compensation Paid to Post-masters on S. B. business.	Salary.	Forward Allowance.	Allowance towards Rent, Fuel and Light.
		\$ cts.		\$ cts.	% cts.	\$ cts.	% cts.	% cts.	% cts.	\$ cts.	\$ cts.
Ridgeway .....	Welland .....	768 98	402	4,247 35	34 74	1,495 04	11 33	35 49	252 00	32 00	
Ripley .....	Bruce .....	1,178 85	216	2,132 75	15 96	1,402 84	6 21		360 00	10 00	40 00
Riversdale .....	do .....	199 24	102	2,074 30	12 78	1,561 98	5 77		51 00	1 00	
Riverside .....	York .....	2,794 76	735	8,741 24	97 77	998 62	23 23	33 99	540 00		80 00
Rockingham .....	Renfrew .....	218 61	138	3,844 79	25 20	476 72	10 23	5 28	84 00	45 00	
Rockton .....	Wentworth .....	234 95	155	2,923 66	19 57	342 77	7 41		84 00	30 00	
Rockwood .....	Wellington .....	636 23	479	5,122 25	38 25	1,984 82	13 60	5 64	256 00		
Rodney .....	Elgin .....	1,301 17	910	9,146 45	67 62	3,036 47	23 61	21 30	450 00	10 00	60 00
Rosemont .....	Simcoe .....	430 17	160	2,594 57	17 34	1,116 92	6 65	2 75	144 00	45 00	
Roseau .....	Muskoka & P. Sound .....	509 06	240	3,697 72	26 46	2,214 13	10 86	3 04	180 00	80 00	
Rothsay .....	Wellington .....	320 47	77	843 44	5 91	235 04	2 11		114 00		
Rusholme Road (Toronto) .....	York .....		89	939 88	10 36	10 00	2 35	0 83			
Russell .....	Russell .....	714 53	126	5,351 47	36 60	2,139 50	14 81	0 57	240 00	24 00	
Ruthven .....	Essex .....	312 27	495	5,711 25	41 66	232 68	14 29		128 00	12 00	
Sst. Ann's .....	Monck .....	123 26	34	353 64	2 41		0 88		62 00		
St. Catharines .....	Lincoln & Niagara .....	13,704 26	3,710	37,562 47	326 77	65,536 81	120 63	134 61	3,500 00	96 00	
St. George (Brant) .....	Brant .....	1,083 00	425	4,549 70	38 04	2,406 20	11 95	6 60	380 00		40 00
St. Jacob's .....	Waterloo .....	463 07	204	2,653 05	19 98	968 36	7 53	3 11	170 00	8 00	
St. Mary's .....	Perth .....	5,541 99	2,499	25,791 90	199 09	17,192 55	70 71	7 37	1,480 00	50 00	220 00
St. Thomas West .....	Elgin .....	16,210 68	4,310	41,984 71	369 56	139,316 23	126 35	132 92	3,800 00	120 00	
St. Williams .....	Norfolk .....	293 95	295	3,335 53	25 02	748 77	8 71		125 00		
Sandwich .....	Essex .....	728 65	330	3,634 56	36 32	4,870 46	13 51	0 54	310 00		20 00
Sarnia .....	Lambton .....	9,351 52	3,407	37,866 45	315 55	34,609 09	107 54	91 13	2,180 00	200 00	360 00
Sault Ste. Marie .....	Algoma .....	3,600 05	2,070	32,026 37	243 82	14,847 99	84 82	10 92	930 00	80 00	140 00
Scarboro' .....	York .....	99 10	45	1,353 15	10 39	470 45	3 73	1 80	45 00		
Schomberg .....	do .....	708 32	144	2,220 20	15 40	1,707 98	5 69	17 83	300 00		
Schreiber .....	Algoma .....	739 84	310	6,540 14	54 60	267 63	16 39	8 20	220 00		
Scotland .....	Oxford .....	233 89	287	4,462 85	30 90	1,139 99	12 51		108 00		
Seaford .....	Huron .....	4,955 73	2,300	24,731 35	201 82	18,185 45	70 13	108 92	1,300 00	180 00	200 00
Selkirk .....	Haldimand .....	500 91	442	10,672 23	70 91	3,132 17	27 93		185 00	4 00	
Servern Bridge .....	Ontario .....	421 96	234	2,927 64	19 65	627 50	7 71		147 00	6 00	
Shakespeare .....	Oxford .....	524 87	304	4,149 53	32 43	1,948 74	11 18		200 00		
Shannonville .....	Hastings .....	503 98	350	5,318 13	37 78	559 16	13 44	0 25	180 00	24 00	
Sharon .....	York .....	178 77	54	395 08	3 58	490 82	1 72		72 00		
Shelburne .....	Grey .....	2,222 04	1,543	19,338 97	136 35	6,711 21	52 00	51 84	680 00	36 00	100 00



STATEMENT showing the Accounting Offices in Operation, &c., in Ontario—*Concluded.*

Name of Office.	County.	Gross Postal Revenue.	Number of Money Orders Issued.	Total Amount of Money Orders Issued.	Total Commission received from Public.	Total Amount of Money Orders Paid.	Com- pen- sation Paid to Post- masters on M.O. business.	Com- pen- sation Paid to Post- masters on S. B. business.	Salary.	Forward Allowance.	Allowance towards Rent, Fuel and Light.
		\$ cts.		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Tilsonburg .....	Norfolk .....	4,051 40	1,642	17,374 63	130 76	15,313 59	49 36	14 91	1,080 00	320 00	160 00
Tiverton .....	Bruce .....	944 11	425	5,182 10	39 91	3,957 07	15 64	13 44	340 00	8 00	40 00
+Toronto .....	York .....	365,175 92	26,608	337,981 90	3,337 53	1,861,212 72					
Tottenham .....	Simcoe .....	1,128 23	492	5,845 51	42 33	2,361 83	14 96	14 53	420 00	40 00	40 00
Trenton .....	Hastings .....	5,122 78	1,586	14,944 35	125 29	13,615 82	43 00	46 16	1,300 00	200 00	
Tullamore .....	Peel .....	1,327 89	76	2,291 60	13 52	321 92	5 97		40 00		
Tweed .....	Hastings .....	1,327 41	519	6,536 06	46 75	2,296 40	16 67		420 00	60 00	40 00
Uffington .....	Ontario .....	289 54	72	1,126 67	7 86	363 38	3 30		90 00	10 00	
Underwood .....	Bruce .....	352 56	540	10,539 40	66 74	2,601 48	26 86		152 00		
Union .....	Elgin .....	208 07	107	903 07	8 70	659 93	2 79		114 00		
Unionville .....	York .....	561 93	176	2,307 77	16 88	1,474 61	6 63	5 14	210 00	80 00	
Uxbridge .....	Ontario .....	3,504 74	1,329	17,240 24	127 79	9,962 94	45 37	12 75	1,010 00	32 00	160 00
Vankleek Hill .....	Prescott .....	1,869 58	469	7,512 31	57 45	9,549 07	39 69	56 23	500 00	24 00	60 00
Varna .....	Huron .....	390 96	243	2,700 34	20 38	657 75	7 02		136 00		
Victoria Harbour .....	Simcoe .....	456 59	194	2,305 36	17 09	866 83	5 91	4 59	174 00		
Vienna .....	Elgin .....	355 22	877	15,201 89	99 14	2,432 42	39 54	14 54	156 00	3 00	
Vittoria .....	Norfolk .....	485 05	758	8,961 28	66 69	1,838 25	22 93	4 70	200 00	16 00	
Wales .....	Stormont .....	481 87	48	1,035 74	8 18	849 98	3 61		198 00	120 00	
Walkerton .....	Bruce .....	4,785 97	1,970	21,649 12	168 42	16,698 70	58 63	29 19	1,400 00	200 00	220 00
Walkerville .....	Essex .....	5,860 04	655	5,860 04	60 06	4,158 08	15 90	4 15	580 00	80 00	80 00
Wallaceburg .....	Bothwell .....	2,207 20	655	22,174 25	166 93	8,743 74	69 60	11 48	840 00	54 00	120 00
Wallacetown .....	Elgin .....	437 34	385	6,011 71	40 60	638 83	15 23		235 00	16 00	
Wardsville .....	Middlesex .....	683 71	582	12,471 98	79 42	2,856 86	32 07	20 27	300 00		
Warkworth .....	Northumberland .....	1,210 95	1,315	24,345 31	157 15	2,919 75	63 67	9 91	380 00	40 00	
Warsaw .....	Peterboro' .....	340 82	165	3,763 58	24 57	678 25	9 42		108 00		
Warwick .....	Lambton .....	265 10	268	4,430 71	31 43	743 28	12 10		96 00		
Watertown .....	Wentworth .....	658 40	373	5,364 03	39 06	1,798 63	14 07	17 06	310 00		40 00
Waterford .....	Norfolk .....	1,815 86	808	9,346 18	66 04	3,451 69	24 73	8 96	580 00	85 00	60 00
Waterloo West .....	Waterloo .....	4,785 46	1,057	10,512 93	96 26	32,389 33	34 17	27 63	1,320 00	16 00	200 00
Watford .....	Lambton .....	2,638 98	1,842	25,427 52	179 93	10,253 03	65 69	115 86	730 00	32 50	120 00
Waubanshene .....	Simcoe .....	973 92	364	4,543 36	35 61	1,792 19	12 07	13 07	320 00		40 00
Waverley .....	do .....	208 95	250	3,149 79	20 93	114 18	7 88		90 00	10 00	
Welland .....	Welland .....	3,405 00	923	10,547 99	79 05	10,583 01	30 81	15 62	950 00	160 00	140 00
Welland Port .....	Monck .....	396 77	643	13,582 64	83 17	933 34	34 34	2 99	144 00		
Wellesley .....	Waterloo .....	713 78	605	8,277 33	62 54	2,810 47	20 89	14 96	312 00	8 00	
Wellington .....	Prince Edward .....	731 38	642	8,188 24	59 53	1,799 37	22 36		324 00		



West Lorne.....	1,041 34	477	5,475 16	41 28	1,590 54	13 90	1 34	375 00	18 00	40 00
Weston .....	921 81	471	6,651 86	49 99	3,726 83	19 22	22 32	320 00	16 00	40 00
Westport .....	1,638 97	468	10,156 49	70 67	2,834 94	27 04	10 25	360 00	12 00	40 00
West Toronto Junction	3,679 45	1,173	12,515 57	119 81	9,368 23	36 78	4 03	700 00	140 00	140 00
Whitby .....	4,116 06	1,517	13,186 94	109 12	15,234 26	38 13	11 63	1,370 00	200 00	240 00
Whitevale .....	258 96	50	799 34	5 72	777 30	2 03	.....	96 00	.....	.....
Wilton .....	2,839 87	1,784	24,022 18	169 30	8,594 39	61 60	6 35	820 00	75 00	120 00
Wilkesport .....	239 08	442	7,784 09	50 36	1,402 83	19 79	.....	96 00	3 00	.....
Williamstown.....	1,986 01	133	2,607 72	18 25	2,169 48	7 04	10 82	260 00	.....	.....
Winchester .....	697 01	501	5,938 23	45 01	5,584 76	16 54	9 82	540 00	24 00	80 00
+ Windsor.....	11,512 85	2,921	35,605 05	297 32	46,230 35	.....	.....	.....	.....	.....
Wingham .....	4,133 51	1,721	19,203 78	145 41	15,437 24	53 18	45 39	1,080 00	60 00	180 00
Winona .....	1,062 01	98	1,081 31	14 54	4,080 97	5 47	.....	156 00	36 00	.....
Woodbridge .....	1,065 31	516	8,413 69	57 50	2,674 47	21 64	30 01	400 00	4 00	40 00
Woodham .....	208 29	133	1,746 91	12 70	1,160 42	4 44	.....	76 00	.....	.....
Woodlee .....	244 52	165	3,446 11	22 56	382 20	8 65	11 24	90 00	.....	.....
Woodstock .....	15,399 32	4,829	48,774 75	407 81	92,998 17	140 17	76 70	3,340 00	160 00	500 00
Woodville .....	915 74	889	16,362 86	105 26	3,173 13	42 75	11 92	350 00	32 00	40 00
Wroxeter .....	917 65	567	8,721 54	65 63	4,425 03	23 74	24 37	340 00	18 00	40 00
Wyoming .....	1,393 72	1,216	16,665 16	120 82	4,874 11	44 37	24 48	440 00	4 50	60 00
Yarker .....	567 42	186	1,524 20	12 91	2,013 56	4 17	2 26	220 00	1 50	.....
York .....	313 61	153	3,749 62	24 88	1,134 06	10 54	24 53	144 00	.....	.....
Yorkville .....	6,972 32	2,278	26,182 99	287 77	6,943 17	70 47	136 16	1,200 00	.....	220 00
Zurich .....	777 36	423	9,044 45	59 18	1,616 75	24 30	0 28	240 00	.....	.....
Dead Letter Office.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Non-Accounting Post Offices.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total .....	243,140 11	477,424	6,036,938 44	48,398 85	6,078,426 38	14,004 51	9,031 71	94,274 42	2,956 83	40 00
	1,731,595 14	477,424	6,036,938 44	48,398 85	6,078,426 38	14,004 51	9,031 71	352,866 88	22,834 81	22,554 06

+ Salaries, &c., entered in Auditor General's Report.

+ Opened 1st October, 1890.

W. H. SMITHSON,  
Accountant.

WILLIAM WHITE,  
Deputy Postmaster-General.

## PROVINCE OF QUEBEC.

STATEMENT showing the Accounting Offices in operation; the Gross Postal Revenue; the Number and Amount of Money Orders issued and paid; the amount of Commission thereon; and the Compensation, Salary and Allowances paid to the Postmaster at each office respectively, during the Year ended 30th June, 1891.

Name of Office.	County.	Gross Postal Revenue.	Number of Money Orders Issued.	Total Amount of Money Orders Issued.	Total Commission received from Public.	Total Amount of Money Orders Paid.	Com- pen- sation Paid to Post- masters on M. O. business.	Com- pen- sation Paid to Post- masters on S. B. business.	Salary.	Forward Allowance	Allowance towards Rent, Fuel and Light.
		\$ cts.		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Abercorn.....	Brome.....	137 48	129	1,278 79	10 47	748 41	3 40	2 63	80 00	150 00	40 00
Acton Vale.....	Bagot.....	1,207 89	129	2,743 52	19 18	4,261 00	12 63	2 63	360 00	18 00	
Agnes.....	Beauce.....	432 61	394	5,669 15	42 01	1,947 34	15 90	12 39	295 00	40 00	60 00
Arthabaskaville.....	Arthabaska.....	1,433 28	573	5,949 30	34 28	6,338 02	25 42	0 16	480 00	81 00	
Asylmer East.....	Ottawa.....	1,248 75	599	10,779 30	75 24	3,725 90	28 61	29 04	498 00	10 00	40 00
Bagotville.....	Chicoutimi.....	253 94	199	5,096 45	32 40	159 15	12 81		90 00	60 00	
Beauharnois.....	Beauharnois.....	1,054 12	550	9,499 00	62 83	5,449 96	25 39	3 41	420 00	90 00	
Béancour.....	Nicolet.....	416 19	15	568 27	4 47	933 20	2 90	0 12	190 00		
Bedford.....	Missisquoi.....	1,314 56	559	5,706 28	49 79	5,398 11	16 80	23 99	420 00		60 00
Beebe Plain.....	Stanstead.....	231 07	42	1,052 96	7 62	3,299 56	3 28		150 00		
Berthier (en haut).....	Berthier.....	1,332 24	669	11,251 96	82 37	4,527 80	31 44	35 86	510 00	100 00	80 00
Black Cape.....	Bonaventure.....	359 70	191	4,092 13	25 42	1,037 51	10 85		147 00		
Bolton Centre.....	Brome.....	255 01	91	1,347 26	11 33	1,021 04	4 28		235 00	20 00	
Bryson.....	Pontiac.....	465 03	236	3,694 70	23 95	893 46	9 42	5 67	195 00	60 50	
Buckingham.....	Ottawa.....	2,627 66	776	18,614 42	129 78	5,192 80	54 16	74 38	720 00	48 00	100 00
Cacouna.....	Transcona.....	766 72	776	1,447 65	11 57	3,340 60	4 50	1 27	300 00		
*Cantley.....	Ottawa.....	120 72	54	1,119 80	7 34	89 97	2 80		40 00	11 50	
Capelton.....	Sherbrooke.....	603 19	412	6,025 09	62 44	827 28	15 99	13 90	204 00		
Cap Santé.....	Portneuf.....	271 19	54	2,662 82	16 63	587 66	6 70	0 55	100 00		
Chamby Canton.....	Chamby.....	573 98	154	3,189 88	26 17	1,968 37	9 51	11 32	222 00		
Chapreau.....	Pontiac.....	306 60	133	1,835 62	12 56	484 93	4 64		120 00		
Chelsea.....	Ottawa.....	383 14	212	2,524 68	20 47	772 62	6 97	2 47	190 00	8 00	
Chicoutimi.....	Chicoutimi.....	1,726 72	296	11,891 45	74 62	10,133 54	38 17	4 85	480 00	32 00	60 00
Clarenceville.....	Missisquoi.....	583 30	206	3,584 41	26 49	2,467 14	13 54	3 49	240 00	16 00	
Coaticook.....	Stanstead.....	3,466 86	1,382	13,252 12	126 34	7,033 15	39 32	23 39	950 00	100 00	
Compton.....	Compton.....	824 53	241	2,723 69	26 28	2,749 04	8 80	1 93	336 00	52 00	40 00
Cookshire.....	do.....	1,450 68	651	8,927 66	77 52	3,864 72	25 24	21 25	420 00		
Coteau Landing.....	Soulanges.....	430 06	199	7,445 05	46 39	1,422 16	19 56		240 00	48 00	
Cowansville.....	Missisquoi.....	2,117 75	659	6,873 10	55 78	13,895 60	19 13	3 15	616 00		80 00
Danville.....	Richmond.....	2,228 39	603	7,457 32	73 78	6,101 85	25 32	33 63	600 00	32 00	100 00

Deschambault	418 07	63	1,293 66	9 51	660 56	3 79	35 72	132 00
Drummondville East	1,832 90	220	2,069 61	59 30	2,271 39	7 23	2 54	520 00
Dunham	496 45	425	7,727 64	53 71	1,922 78	20 91		220 00
East Farnham	213 19	129	955 39	10 40	687 30	2 68		84 00
Etchemin	1,005 81	201	3,323 40	24 79	968 70	9 95		280 00
Farnham	1,998 58	973	14,086 93	114 29	3,809 03	39 75	37 65	550 00
Franklin Centre	237 59	309	517 11	4 01	950 87	2 02		104 00
Frelinghuysburg	581 84	369	3,673 85	30 55	2,322 69	10 62	19 23	260 00
Gaspé Basin	823 35	361	10,731 70	77 19	3,332 80	29 59	15 00	16 00
Granby	2,014 31	1,018	11,604 31	94 03	5,638 98	31 78	2 38	370 00
Grenville	825 33	329	21,020 23	113 43	1,688 62	53 74	7 28	560 00
Grindstone Island	201 45	232	7,591 65	44 67	960 72	18 98		320 00
Hadly	561 08	121	1,864 90	16 88	936 39	5 67	1 96	50 00
Hebertville	372 69	21	466 23	2 86	2,088 12	4 18		168 00
Henningsford	849 49	87	3,178 06	20 10	2,358 70	10 96	8 36	174 00
Henryville	351 72	59	1,715 47	13 30	2,191 03	4 77		288 00
Hochelaga	2,416 99	473	6,175 61	64 56	2,104 94	17 31	21 12	136 00
Hochelaga	618 63	55	698 05	5 76	944 52	1 74	13 26	580 00
Hull	2,909 82	752	13,010 93	92 86	9,507 18	36 27	55 73	200 00
Huntingdon	2,178 07	673	7,569 43	64 73	7,793 70	23 81	67 57	1,500 00
Inverness	876 97	258	7,176 23	49 24	3,501 65	19 98	25 18	600 00
Joliette	2,630 03	791	13,106 15	94 42	9,651 68	41 60	3 83	280 00
Kamouraska	477 00	60	1,752 19	12 82	3,747 84	6 77		649 66
Kingsbury	223 31	195	2,245 29	24 42	3,474 84	5 80		238 00
Kingsey Falls	488 94	87	1,584 48	16 32	1,013 32			90 00
Kinnear's Mills	280 26	68	1,364 17	12 99	382 01	4 68	9 31	210 09
Knowlton	1,540 22	899	12,790 77	98 20	1,061 97	5 10	13 18	120 00
+La Beauce	2,426 42	1	49 00	0 25	4,190 19	35 40	24 59	456 00
Lachine	856 75	312	4,605 05	46 48	1,17 95	0 15		24 00
Lachute	1,959 50	500	9,176 21	72 77	4,453 15	19 25	22 02	510 00
Lacolle	850 08	257	5,746 36	39 38	8,812 00	29 75	54 07	600 00
Lambton	465 95	195	1,659 16	12 73	1,861 27	16 69	10 67	300 00
Laprairie	433 16	195	3,297 69	24 12	818 89	4 42		224 00
L'Assomption	989 21	55	2,015 84	12 37	1,493 49	9 19	4 00	215 00
Laurentides	537 81	132	2,241 84	16 12	2,040 06	5 83		400 00
Launon	566 50	212	4,729 36	34 72	5,039 33	6 58		220 00
Lawrenceville	235 01	139	3,813 80	28 26	5,634 63	20 04		210 00
Leeds	63 26	70	1,817 48	13 95	1,145 83	11 89		100 00
Lennoxville	2,013 66	729	7,725 41	73 85	2,289 34	6 66	8 32	24 00
L'Epiphanie	365 38	13	532 53	3 50	5,933 18	22 87	12 62	660 00
Les Eboulements	470 43	217	6,087 41	34 93	822 18	1 55	0 05	200 00
Lévis	1,563 80	537	11,255 53	98 71	2,920 83	20 43		134 00
Little Métis	346 96	130	3,697 35	24 70	10,900 82	40 95		380 00
Longueuil	733 14	69	1,202 92	11 76	4,611 87	11 63	8 03	120 00
Lotbinière	356 19	247	5,150 97	40 49	1,443 46	3 87		320 00
Louisville	1,285 60	113	2,566 40	19 04	3,147 29	17 06		174 00
Magog	1,949 57	379	6,081 26	56 74	2,683 68	9 91		420 00
Mansville	602 30	587	14,039 67	91 58	3,318 19	36 35	19 15	480 00
Massawippi	279 97	63	693 55	6 28	1,628 69	36 33		220 00
Stanstead					459 54	2 61		96 00

+ Opened 2nd January, 1891.

\* Opened 1st October, 1890.



STATEMENT showing the Accounting Offices in operation, &amp;c., in Quebec—Continued.

Name of Office.	County.	Gross Postal Revenue.	Number of Money Orders Issued.	Total Amount of Money Orders Issued.	Total Commission received from Public.	Total Amount of Money Orders Paid.	Compensation Paid to Post-masters on business.	Compensation Paid to Post-masters on S. B. business.	Salary.	Forward Allowance.	Allowance towards Rent, Fuel and Light.
		\$ cts.		\$ cts.	% cts.	\$ cts.	% cts.	% cts.	\$ cts.	% cts.	\$ cts.
Montmagny.....	Montmagny	1,687 68	224	4,074 97	29 67	6,661 95	17 74	0 06	520 00	40 00	80 00
†Montreal.....	Hochelaga	316,721 29	27,391	382,735 43	3,970 50	1,027,593 30					
Murray Bay.....	Charlevoix	596 27	882	23,478 37	139 96	6,404 22	59 04	0 52	270 00	120 00	
Napierville.....	Napierville	632 37	218	4,896 46	34 17	1,862 97	14 59		230 00		
New Carlisle.....	Bonaventure	575 26	148	3,800 71	25 58	4,773 29	11 29	3 11	240 00		
Nicolet.....	Nicolet	1,487 68	185	2,977 08	26 18	5,058 53	13 64	1 63	480 00	120 00	60 00
North Hatley.....	Stanstead	413 67	366	3,919 34	33 66	569 20	10 69		120 00	10 00	
North Wakefield.....	Ottawa	287 46	65	1,574 83	10 45	744 35	4 45		100 00	46 00	
†Notre Dame de Lévis.....	Lévis	1,937 88	101	1,992 25	15 47	155 32	5 07		266 67		
Missisquoi bridge.....	Missisquoi	441 17	454	9,010 44	58 89	437 78	22 96	2 41	132 00		
134†Oronto St. (Montreal)	Hochelaga		382	7,460 13	70 56	158 66	18 72				
4†Ormstown.....	Chateauguay	1,198 02	112	4,354 31	29 11	3,833 33	13 66	4 98	360 00		40 00
†Aspebiac.....	Bonaventure	493 37	476	15,348 98	100 60	3,436 56	43 72		255 00	200 00	
Perce.....	Gaspé	557 99	430	7,149 15	50 40	4,054 85	24 68	9 18	320 00	40 00	
Pierreville.....	Yamaska	758 80	230	4,255 51	28 20	1,978 98	13 30	0 90	243 00	10 00	20 00
Pointe à Pic.....	Charlevoix	563 11	126	1,585 45	10 69	3,401 95	4 46		230 00		
Point St. Charles.....	Charlevoix	3,924 56	2,091	24,808 56	283 86	5,548 23	66 26	78 06	900 00		140 00
Port de Maskinongé.....	Maskinongé	403 42	252	3,766 58	27 03	213 72	9 55		160 00	16 00	
Portage du Fort.....	Pontiac	973 08	286	6,724 84	48 96	1,704 98	17 88	15 78	430 00	5 00	40 00
†Quebec.....	Quebec	42,494 25	6,675	101,420 05	933 08	182,098 09					
Quyon.....	Pontiac	756 04	380	10,248 30	63 54	2,871 08	28 77	19 49	300 00	24 00	
Richmond East.....	Richmond	1,909 10	976	12,235 81	102 08	6,674 76	34 71	37 70	580 00	80 00	
Rigaud.....	Vaudreuil	846 44	115	2,158 46	15 55	2,791 36	8 44		290 00		
Rimouski.....	Rimouski	1,715 97	499	9,836 27	87 40	11,632 96	33 22	46 66	610 00	90 00	80 00
River David.....	Yamaska	436 43				464 00	0 75		120 00	2 50	
Rivière du Loup (en l'ars)	Yamaska	1,922 29	490	9,071 22	70 25	10,357 84	29 63	25 86	650 00	120 00	100 00
†Rivière du Loup Station	do										
Robinson.....	Compton	1,092 65	117	2,540 10	21 57	375 20	6 39		360 00		40 00
Rock Island.....	Robinson	536 35	206	3,626 51	30 22	1,600 80	10 65		192 00	20 00	
Roxton Falls.....	Shefford	437 10	157	2,005 94	16 49	3,626 20	5 03		150 00		
St. André Avelin.....	St. André	845 20	75	1,182 20	9 24	2,142 07	6 07		280 00		
St. Andrew's East.....	Ottawa	388 81	284	8,444 42	48 64	1,919 26	21 86		160 00	31 50	
Ste. Anne de la Pêrade	Argenteuil	919 74	196	3,687 66	27 99	3,349 24	10 49	41 42	340 00	16 00	40 00
Ste. Anne de la Pêrade	Champlain	795 58	48	607 86	5 68	1,402 15	2 35	2 25	260 00	20 00	
tière.....	Kamouraska	811 65	70	2,061 33	17 03	1,863 07	6 64		312 00	40 00	

St. Athanase.....	844 01	329	3,828 99	29 31	3,703 21	13 89	0 19	230 00	.....	.....
St. Barthélemi.....	488 81	337	6,045 10	42 54	1,238 04	17 85	.....	168 00	.....	.....
St. Casimir.....	763 81	83	4,357 69	25 50	3,322 10	17 83	19 82	250 00	.....	12 00
†St. Catharine Street (Montreal).....	.....	2767	30,871 53	373 85	2,383 02	17 73	.....	.....	.....	.....
St. Césaire.....	926 07	303	3,212 75	25 33	6,367 59	19 45	0 40	360 00	.....	40 00
St. Charles River.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Richelieu.....	263 09	93	1,952 81	13 00	644 32	5 27	0 52	147 00	.....	.....
St. Chrysostome.....	579 18	318	7,925 06	52 31	2,498 84	23 65	1 81	220 00	.....	.....
St. Croix.....	322 94	84	2,146 83	15 97	2,554 94	10 57	.....	140 00	.....	.....
St. Cunegonde.....	2,506 46	232	3,888 31	39 08	752 01	10 72	.....	600 00	.....	80 00
*St. Cuthbert.....	357 91	58	412 98	2 77	.....	1 03	.....	150 00	.....	.....
St. Eustache.....	593 34	171	4,136 35	27 48	1,296 07	10 66	.....	228 00	.....	12 00
St. Félix de Valois.....	496 17	102	3,546 73	24 57	581 07	9 47	.....	176 00	.....	16 00
St. Flavie Station.....	639 28	89	2,290 37	15 29	976 21	6 16	.....	244 00	.....	24 00
St. François Beauce.....	392 77	40	991 41	8 59	843 75	3 39	.....	140 00	.....	.....
St. Geneviève de Ba- tiscan.....	468 77	82	1,434 38	12 31	2,441 51	7 10	.....	170 00	.....	30 00
†St. George East.....	586 41	60	1,092 68	8 46	5 05	2 73	.....	236 00	.....	.....
St. Grégoire.....	444 88	19	788 39	4 78	885 01	2 95	.....	185 00	.....	15 00
St. Henri de Montreal.....	2,054 74	269	4,062 28	42 56	1,354 08	11 28	3 41	540 00	.....	60 00
St. Hyacinthe.....	5,817 09	1433	15,231 10	136 93	16,369 61	51 38	4 45	1,760 00	.....	224 00
St. Jean de Chailions.....	353 67	101	3,911 94	25 41	2,116 34	11 71	.....	174 00	.....	.....
St. Jérôme.....	1,473 12	401	9,030 82	64 25	5,679 03	27 99	1 58	550 00	.....	135 00
St. John.....	4,046 76	1,124	14,471 45	118 92	13,840 89	42 11	9 62	1,150 00	.....	80 00
St. John's East.....	4,861 70	301	4,846 35	40 66	388 21	12 28	.....	1,350 00	.....	200 00
St. John Suburb (Que.).....	774 76	67	2,141 53	14 78	2,557 06	8 55	.....	320 00	.....	40 00
St. Marie de Monnoir.....	394 35	178	3,619 93	22 85	413 29	9 46	.....	132 00	.....	.....
St. Martine.....	383 82	147	3,219 79	28 85	604 88	8 87	11 47	150 00	.....	.....
St. Patrick's Hill.....	717 83	507	14,416 97	86 69	6,062 73	48 48	.....	320 00	.....	40 00
St. Paul's Bay.....	402 25	100	1,670 17	13 57	1,140 52	5 61	.....	172 00	.....	16 00
St. Pie.....	373 63	.....	.....	.....	406 15	0 19	.....	145 00	.....	21 00
St. Polycarpe.....	581 99	121	2,527 27	18 05	854 92	7 42	7 89	230 00	.....	.....
St. Raymond.....	546 79	212	4,481 45	35 00	3,085 49	15 32	.....	220 00	.....	32 00
St. Rémi.....	535 80	1,206	22,079 72	185 04	9,305 22	60 30	6 00	1,560 00	.....	650 00
St. Roch de Québec.....	2,447 87	204	3,352 49	27 10	1,813 40	10 01	.....	700 00	.....	100 00
St. Sauveur de Québec.....	971 26	206	4,743 47	32 12	2,990 72	12 75	.....	320 00	.....	80 00
St. Scholastique.....	370 68	156	3,457 53	26 77	1,323 40	10 45	.....	140 00	.....	.....
St. Sylvester East.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Thérèse de Blain- ville.....	800 76	241	9,761 95	55 97	2,601 61	24 21	.....	313 06	.....	4 00
Terrebonne.....	935 18	234	3,801 32	32 63	1,493 14	11 67	3 78	300 00	.....	20 00
Compton.....	803 40	316	7,595 17	47 53	1,585 43	19 58	9 70	280 00	.....	33 50
Shawville.....	13,892 20	2,346	24,348 72	218 41	24,659 14	7 09	.....	420 00	.....	60 00
†Sherbrooke.....	1,346 39	116	1,256 92	9 71	3,031 22	34 31	2 88	820 00	.....	200 00
Mégantic.....	2,691 53	749	10,947 51	78 86	9,779 46	6 01	3 19	200 00	.....	40 00
Richelieu.....	548 59	102	2,257 26	15 65	1,200 98	2 16	.....	76 00	.....	24 00
Drummond.....	148 86	76	858 62	6 89	83 48	2 63	.....	76 00	.....	24 00
South Han- Wolfe.....	1,195 20	70	2,460 60	16 91	2,784 77	12 63	4 44	360 00	.....	40 00
Stanfold.....	1,020 48	289	2,783 82	30 56	1,900 74	8 07	2 36	500 00	.....	80 00
Stanstead.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

† Salaries, &amp;c., entered in Auditor General's Report.

\* Opened 1st April, 1891.

† Opened 1st October, 1890.

STATEMENT showing the Accounting Offices in operation, &c., in Quebec—Concluded.

Name of Office.	County.	Gross Postal Revenue.	Number of Money Orders Issued.	Total Amount of Money Orders Issued.	Total Commission received from Public.	Total Amount of Money Orders Paid.	Compensation Paid to Post-masters on business.	Compensation Paid to Post-masters on S. B. business.	Salary.	Forward Allowance	Allowance towards Rent, Fuel and Light.
		\$ cts.		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Sutton.....	Brome.....	904 24	410	4,754 90	40 25	2,629 54	16 14	11 73	320 00	.....	40 00
Sweetsburg.....	Missisquoi.....	691 57	241	3,741 18	30 59	1,477 88	9 72	.....	280 00	.....	.....
Terrebonne.....	Terrebonne.....	713 48	281	4,868 99	34 06	5,638 25	13 35	.....	310 00	.....	40 00
Three Rivers.....	St. Maurice.....	6,579 76	1,195	14,877 79	129 15	19,365 48	54 88	11 24	1,700 00	360 00	.....
Thurso.....	Ottawa.....	794 15	235	3,335 36	25 10	1,399 51	9 78	4 47	300 00	.....	40 00
Trois Pistoles.....	Témiscouata.....	944 59	303	7,004 65	48 57	2,473 54	19 02	1 60	320 00	.....	40 00
Uxverton.....	Drummond.....	294 22	37	1,945 47	8 49	1,873 08	3 55	.....	120 00	.....	.....
Valcourt.....	Shefford.....	226 71	6	458 22	3 15	351 10	1 24	.....	80 00	.....	.....
Valleyfield.....	Beauharnois.....	2,549 05	730	8,835 02	71 17	5,731 61	26 57	5 46	680 00	.....	.....
Victoriaville.....	Arthabaska.....	1,232 77	88	1,014 07	9 04	1,114 05	3 39	0 12	400 00	200 00	40 00
Waterloo East.....	Shefford.....	2,226 64	1,337	12,509 46	104 85	9,189 95	36 51	10 83	780 00	96 00	120 00
12 Windsor Mills.....	Richmond.....	1,673 00	239	5,158 68	46 28	2,015 67	14 46	0 45	460 00	8 00	60 00
5 Yamachiche.....	St. Maurice.....	726 65	34	775 12	6 35	1,254 78	4 04	.....	280 00	24 00	.....
Non-Accounting Post Offices.....	.....	147,164 19	.....	.....	.....	.....	.....	.....	64,866 83	3,488 50	200 00
Total.....	.....	697,804 39	90,900	1,440,009 01	12,395 05	1,760,308 58	2,773 76	1,242 46	123,078 22	8,938 00	4,780 00

W. H. SMITHSON,  
Accountant.

WILLIAM WHITE,  
Deputy Postmaster-General.



## PROVINCE OF NOVA SCOTIA.

STATEMENT showing the Accounting Offices in operation, the Gross Postal Revenue, the Number and Amount of Money Orders issued and paid, the Amount of Commission thereon, and the Compensation, Salary and Allowances paid to the Postmaster at each Office respectively during the Year ended 30th June, 1891.

Name of Office.	County.	Gross Postal Revenue	Number of Money Orders Issued.	Total Amount of Money Orders Issued.	Total Commission received from Public.	Total Amount of Money Orders Paid.	Com- pen- sation Paid to Post- masters on M. O. business.	Com- pen- sation Paid to Post- masters on S. B. business.	Salary.	Forward Allowance	Allowance towards Rent, Fuel and Light.
		\$ cts.		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	cts.
Acadia Mines.....	Colchester	1,620 86	1,744	21,929 36	180 34	4,721 20	58 09		500 00	12 00	60 00
* Advocate Harbour.....	Cumberland	296 35	16	547 25	4 44	408 50	1 37		120 00	32 00	
Amherst.....	do	7,392 60	4,058	48,919 39	410 81	62,252 54	136 27		1,760 00	150 00	
Annapolis.....	Annapolis	2,484 50	1,932	22,032 57	173 04	18,741 93	63 29		660 00	300 00	120 00
Antigonish.....	Antigonish	2,970 57	1,659	19,428 92	157 44	68,117 09	104 43	34 48	800 00	104 00	
Arichat.....	Richmond	837 72	1,482	44,388 51	273 88	20,290 04	144 91		380 00		40 00
Athol.....	Cumberland	181 42	116	1,781 24	11 51	725 19	5 03		60 00	60 00	
Auburn.....	King's.....	339 86	236	2,420 38	18 76	845 71	6 13		90 00		
Aylesford.....	do	622 13	788	8,353 81	70 59	4,975 81	26 24	2 07	240 00	40 00	
Baddeck.....	Victoria	1,150 63	816	28,442 36	170 71	11,811 56	86 70	41 32	400 00	135 00	
Barrington.....	Shelburne	598 91	616	11,995 08	82 55	14,464 22	53 53		350 00	100 00	20 00
Bass River.....	Colchester	352 82	219	2,567 14	20 08	3,479 96	9 81	12 10	120 00	2 00	
Bayfield.....	Antigonish	129 19	174	3,977 49	25 50	1,007 95	10 60		50 00		
Bear River (west side).....	Digby	888 63	954	14,240 91	100 41	4,583 38	42 04		320 00		
Berwick.....	King's	1,207 55	1,089	16,418 22	129 67	9,307 04	50 10	37 78	400 00		40 00
Boylston.....	Guysboro'	184 73	126	2,019 95	14 57	1,662 31	7 56		84 00		
Bridgeport.....	Cape Breton	198 39	315	7,356 24	47 05	848 70	19 56		72 00		
Bridgetown.....	Annapolis	1,964 62	1,447	18,844 58	149 10	25,675 32	58 46	16 19	520 00		80 00
Bridgewater.....	Lunenburg	2,702 34	2,241	32,156 78	243 46	11,060 58	90 45		830 00	120 00	
Caledonia Corner.....	Queen	492 27	1,073	31,597 83	193 62	4,147 56	83 00	8 86	840 00	60 00	
Canning.....	King's	1,027 58	1,003	11,270 16	86 43	4,785 34	33 65	8 18	360 00	50 00	40 00
Canso.....	Guysboro'	1,107 13	1,770	31,599 11	245 70	4,169 42	83 27	19 11	372 00		40 00
Chester.....	Lunenburg	753 44	312	8,207 52	54 67	3,363 82	24 01	0 49	240 00	20 00	
Cheticamp Chapel.....	Inverness	14 00	172	7,250 22	40 88	1,989 84	18 87		96 00		
Cheverie.....	Hants	237 87	181	2,114 40	16 73	810 79	6 96		22 00		
Christmas Island.....	Cape Breton	78 20	73	1,568 06	10 25	1,130 05	4 69		50 00		
Clarke's Harbour.....	Shelburne	227 07	309	9,269 78	58 56	3,020 10	28 53		84 00		
Clementsport.....	Annapolis	343 19	265	3,853 19	27 74	1,852 64	12 15		138 00		

\* Opened 1st April, 1891.

STATEMENT showing the Accounting Offices in operation, &amp;c., in Nova Scotia—Continued.

Name of Office.	County.	Gross Postal Revenue.	Number of Money Orders Issued.	Total Amount of Money Orders Issued.		Total Commission received from Public.	Total Amount of Money Orders Paid.		Compensation Paid masters on business.	Compensation Paid to Post-masters on S. B. business.	Salary.	Forward Allowance.	Allowance towards Rent, Fuel and Light.
				\$	cts.		\$	cts.			\$	cts.	
Clyde River	Shelburne	209 25	160	3,217 88	20 33	2,830 21	11 94	72 00			72 00		
Cow Bay	Cape Breton	786 87	1,419	29,543 01	198 83	3,746 05	78 54	270 00	4 63		270 00	24 30	
Cross Roads (C. H.)	Guysboro'	383 89	69	3,259 46	18 02	434 94	8 21	126 00			126 00		
Dartmouth	Halifax	2,019 19	815	10,162 52	87 34	5,150 21	31 56	540 00	12 52		540 00		80 00
Desecuse	Richmond	320 18	206	5,410 22	34 85	6,421 21	23 86	114 00			114 00		
Digby	Digby	2,049 74	1,817	24,212 73	189 61	11,736 47	71 72	620 00	51 01		620 00	200 00	100 00
Doctor's Cove	Shelburne	76 53	185	3,008 04	20 13	244 75	7 95	32 00			32 00		
+East Southampton	Cumberland	50 40	8	132 88	1 14	228 63	0 33	20 00			20 00	6 00	
Economy	Colchester	393 53	223	3,720 68	27 78	2,453 81	13 35	206 00	0 90		206 00		
Englishtown	Victoria	750 06	95	1,212 28	9 06	3,489 85	9 01	180 00			180 00	48 00	
Five Islands	Colchester	234 78	278	6,424 73	43 63	3,405 93	22 27	120 00			120 00		
Folly Village	do	190 25	153	1,805 10	13 19	1,728 98	7 44	40 00			40 00		
Fouchie	Richmond	131 12	83	1,296 17	9 05	707 03	3 39	74 00			74 00		
Freepoint	Digby	189 98	112	2,771 73	19 38	993 52	8 32	40 00			40 00		
Frizzleton	Inverness	81 08	14	351 70	2 46	962 21	0 88	50 00			50 00	8 00	
Gabarouse	Cape Breton	122 76	251	7,505 07	44 88	1,594 33	19 27	16 00			16 00		
+Grand Etang	Inverness	62 10	8	267 30	1 55	163 75	0 67	116 00			116 00		
Grand Pre	King's	259 49	182	4,405 97	27 70	1,902 60	12 45	240 00			240 00	22 00	
Granville Ferry	Annapolis	607 19	737	11,350 60	80 86	3,374 21	32 51	320 00			320 00	160 00	40 00
Great Village	Colchester	817 44	295	5,360 11	39 28	4,553 91	17 00	480 00	4 15		480 00	160 00	40 00
Guysboro'	Guysboro'	979 70	893	13,511 86	92 57	7,620 04	41 82						
\$Halifax	Halifax	50,887 18	12,501	183,387 83	1,670 21	587,510 55							
Hantsport	Hants	1,122 42	1,628	14,154 75	108 81	7,121 45	41 38	360 00	14 56		360 00		40 00
Harbour au Bouche	Antigonish	303 69	490	7,749 51	51 97	4,724 76	29 93	116 00			116 00		
Hebron	Yarmouth	529 05	287	8,495 62	58 94	4,094 23	24 77	180 00			180 00	24 00	
Hopewell	Pictou	610 90	403	6,246 64	47 49	7,901 71	28 42	215 00			215 00	12 00	
Hubbard's Cove	Halifax	406 97	178	1,787 94	12 73	1,325 06	6 71	145 00			145 00	16 00	
Isaac's Harbour	Guysboro'	204 05	171	3,297 49	24 43	2,686 51	9 34	80 00			80 00		
Kennetcook	Hants	238 20	354	6,318 15	43 98	1,985 89	9 34	446 13			446 13	126 46	31 61
Kentville	King's	2,207 53	2,169	27,443 36	223 58	19,588 80	43 31	56 00			56 00	36 00	
do	do	181 15	298	5,628 65	35 43	321 18	14 35	240 00			240 00	60 00	
Kingsport	do	613 61	807	13,308 30	96 17	7,295 22	39 42	361 43			361 43		
Kingston Station	do	593 29	764	13,502 26	92 15	4,858 49	36 43	251 00			251 00		
Lawrencetown	Annapolis	72 45	54	538 56	3 63	825 64	1 44	33 00			33 00		
Lingan	Cape Breton	178 18	165	4,512 89	29 49	1,788 42	14 31	72 00			72 00	12 00	
Little Bras d'Or	do	718 02	1,059	32,097 03	197 80	958 39	80 77	180 00	5 13		180 00	10 00	
Little Glace Bay	do												





## STATEMENT showing the Accounting Offices in operation, &amp;c., in Nova Scotia—Continued.

Name of Office.	County.	Gross Postal Revenue.	Number of Money Orders Issued.	Total Amount of Money Orders Issued.	Total Commission received from Public.	Total Amount of Money Orders Paid.	Compensation Paid to Postmasters on business, M. O.	Compensation Paid to Postmasters on business, S. B.	Salary.	Forward Allowance.	Allowance towards Rent, Fuel and Light.
		\$ cts.		\$ cts.	% cts.	\$ cts.	% cts.	% cts.	\$ cts.	\$ cts.	\$ cts.
St. Andrew's.	Antigonish	148 24	98	1,208 37	9 14	1,470 81	5 67		60 00	30 00	
St. Peter's.	Richmond	636 25	398	9,125 85	58 45	4,892 16	28 31	1 25	292 00	80 00	
Sandy Cove.	Digby	163 12	169	1,412 65	11 86	1,685 53	5 89		76 00		
Shelburne.	Shelburne	1,214 01	1,842	42,715 04	275 58	8,859 78	115 02		370 00	12 00	40 00
Sherbrooke.	Guyshoro'	486 25	566	15,259 93	93 75	5,462 74	42 54		316 00		40 00
Shubenacadie.	Hants	775 83	378	8,036 09	57 90	5,392 32	27 55	1 25	260 00	250 00	
South Farnington.	Annapolis	271 77	666	19,422 87	120 72	1,103 04	49 75		90 00		
Spring Hill Mines.	Cumberland	2,587 60	2,291	28,411 64	225 27	12,657 36	79 06	24 92	735 00	2 00	100 00
Stellarton.	Pictou.	1,604 30	1,171	12,338 81	104 59	14,229 58	36 36	9 73	520 00	12 50	60 00
Strathlorne.	Inverness	198 70	129	3,072 47	19 31	1,522 37	9 98		76 00		
Sydney.	Cape Breton	3,368 94	2,064	39,079 24	287 39	22,154 41	114 51		820 00	200 00	120 00
Sydney Mines	do	473 35	403	4,238 81	35 45	2,277 17	13 80		170 00		
Tatamagouche.	Colchester.	895 36	789	14,337 92	96 56	10,710 58	54 25	0 75	325 00	30 00	
Thorburn.	Pictou.	354 00			21 10				160 00		
Tidnish.	Cumberland	261 22	255	7,483 53	63 36	317 70	18 73		90 00		
Tracadie.	Antigonish	167 35	306	4,845 50	34 45	5,646 41	25 05		131 00	2 00	
Truro.	Colchester	9,251 56	3,698	47,146 01	403 46	39,017 06	152 31		2,000 00	55 00	
Tusket.	Yarmouth	176 54	182	2,504 77	20 52	3,112 68	13 01		98 00	10 00	
Upper Musquodoboit.	Halifax	210 60	182	4,675 04	30 09	1,521 48	13 74		90 00	10 00	
Upper Stewiacke.	Colchester.	416 12	263	5,126 87	36 99	6,022 06	22 78	1 48	180 00	30 00	
Wallace.	Cumberland	690 74	692	12,833 53	88 07	9,575 89	45 31		277 00		
Walton.	Hants	140 09	106	1,322 23	11 52	2,048 25	5 62		72 00		
Waterville.	King's	846 07	821	13,219 43	88 21	3,241 74	36 36	0 17	332 00		40 00
West Bay.	Inverness	472 33	205	3,973 91	26 94	2,315 52	12 38		140 00	4 00	
Westport.	Digby	422 46	395	8,398 14	54 16	1,669 95	22 56	3 62	170 00		
West River Sheet Harb'r	Halifax	744 39	398	9,033 12	56 86	2,667 34	23 92		270 00		
Westville.	Pictou.	1,241 34	1,158	18,790 87	136 81	7,512 37	51 13	24 67	380 00	10 00	40 00
Weymouth.	Digby	874 15	224	2,830 57	21 85	3,333 43	11 90		335 00		40 00
Weymouth Bridge	do	1,154 20	570	7,661 86	58 56	7,715 01	22 23	4 11	360 00	16 00	40 00
Whycocomagh	Inverness	507 77	351	12,342 42	73 64	6,855 37	40 34		260 00		
Wilmot.	Annapolis.	169 19	145	1,868 37	13 75	1,792 99	6 22		60 00		
Wine Harbour	Guyshoro'	203 39	43	1,317 13	8 06	216 78	3 29		48 00		
Windsor.	Hants	4,789 80	1,916	26,778 99	216 51	29,586 20	78 32	88 88	1,152 00		
Wolfville.	King's	3,172 40	1,770	24,197 00	198 13	23,564 51	68 28	1 45	1,780 00	36 00	120 00
Yarmouth.	Yarmouth	8,095 08	3,400	43,416 81	362 35	86,222 41	148 20		1,980 00	340 00	
Non-Accounting Post Offices		58,601 45							29,123 16	1,232 00	
Total		251,215 66	111,742	1,826,982 78	13,608 11	1,698,274 35	4,963 42	490 60	70,211 29	6,218 96	2,351 61

W. H. SMITHSON, Accountant.

WILLIAM WHITE, Deputy Postmaster-General.

## PROVINCE OF NEW BRUNSWICK.

STATEMENT showing the Accounting Offices in operation; the Gross Postal Revenue; the Number and Amount of Money Orders issued and paid; the amount of Commission thereon, and the Compensation, Salary and Allowances paid to the Postmasters at each Office respectively, during the Year ended 30th June, 1891.

Name of Office.	County.	Gross Postal Revenue.	Number of Money Orders Issued.	Total Amount of Money Orders Paid.	Total Commission received from Public.	Total Amount of Money Orders Paid.	Compensation Paid to Postmasters on business.	Compensation Paid to Postmasters on S. B. business.	Salary.	Forward Allowance.	Allowance towards Rent, Fuel and Light.
		\$ cts.		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Albert .....	Albert.	494 14	858	13,399 71	93 75	4,922 18	37 84	228 00	228 00	60 00	
Alma .....	do	299 97	401	7,444 91	50 05	2,278 51	19 72	100 00	100 00		
Anagance .....	King's.	123 66	182	2,484 97	15 82	1,990 73	7 97	60 00	60 00		
Andover .....	Victoria.	300 56	272	5,921 66	41 02	2,333 86	16 53	0 20	230 00	20 00	
Apoahqui .....	King's.	289 45	196	2,532 67	18 81	1,163 85	7 48	110 00	110 00	45 00	
Armstrong's Brook.	Restigouche.	326 49	429	6,131 18	43 17	1,717 45	16 70		110 00	8 00	
Baie Verte .....	Westmoreland.	437 56	701	17,320 60	135 00	3,010 67	46 65	173 00	173 00	20 00	
Bathurst .....	Gloucester.	1,929 48	1,040	16,192 14	111 41	10,329 93	44 62	550 00	550 00	150 00	
Bathurst Village	do	592 75	471	8,011 13	53 72	2,834 98	21 55	260 00	260 00	6 00	
Bayfield .....	Westmoreland.	230 23	400	8,267 96	55 97	793 56	20 87	80 00	80 00		
Blackville .....	Northumberland.	286 31	88	1,191 31	9 10	433 59	3 43	96 00	96 00		
Bristol .....	Carleton.	449 89	205	4,573 35	34 87	2,546 39	14 55	0 60	136 00	44 00	
Buctouche .....	Kent.	851 56	430	9,299 25	61 82	3,337 35	27 52	0 82	324 00	28 00	
Buttermut Ridge	King's.	456 45	508	10,041 33	67 62	2,485 54	26 78	168 00	168 00	12 00	
Campbellton .....	Restigouche.	2,159 48	1,830	27,091 59	193 45	10,440 68	71 36	22 80	650 00	100 00	
Campo Bello .....	Charlotte.	90 00	72	1,173 51	8 06	498 67	3 30	38 00	38 00		
Canterbury Station.	York.	486 58	577	8,548 86	58 42	1,057 31	22 19	156 00	156 00	8 00	
Caracquet .....	Gloucester.	498 20	406	12,325 95	75 30	804 12	31 27	130 00	130 00	50 00	
Carleton .....	St. John.	1,376 55	474	5,744 58	52 16	5,783 85	17 51	1 87	500 00		
Centreville .....	Carleton.	704 64	270	4,284 56	34 57	3,330 61	20 60	6 15	200 00	14 00	
Chatham .....	Northumberland.	4,196 17	2,098	31,592 95	243 71	14,919 52	92 50		1,300 00	200 00	
Chipman .....	Queen's.	238 15	189	3,323 07	26 78	2,480 82	11 20	78 00	78 00	12 00	
Clifton, King's .....	King's.	117 02	56	729 38	6 86	523 52	2 24	40 00	40 00	34 00	
Cocagne .....	Kent.	245 02	132	3,848 96	23 79	725 89	10 62	80 00	80 00	16 00	
Dalhousie .....	Restigouche.	1,071 77	690	14,036 39	96 01	6,017 75	38 35	450 00	450 00	80 00	
Debeck .....	Carleton.	217 04	206	2,876 31	22 20	1,235 79	7 83	84 00	84 00	40 00	
Dorchester .....	Westmoreland.	1,718 17	1,348	16,345 25	123 61	11,276 20	46 21	620 00	620 00	30 00	
Edmundston .....	Victoria.	846 08	441	10,379 39	68 91	2,817 71	26 99	240 00	240 00	64 00	
Elgin .....	Albert.	314 46	345	6,089 08	41 11	3,749 58	16 33	128 00	128 00	16 00	
Fairville .....	St. John.	825 87	252	2,903 90	24 26	1,308 48	8 20	220 00	220 00		

STATEMENT showing the Accounting Offices in Operation, &c., in New Brunswick—*Concluded.*

Name of Office.	County.	Gross Postal Revenue.	Number of Money Orders Issued.	Total Amount of Money Orders Issued.	Total Commission received from Public.	Total Amount of Money Orders Paid.	Compensation Paid to Post-masters on M. O. business.	Compensation Paid to Post-masters on S. B. business.	Salary.	Forward Allowance.	Allowance towards Rent, Fuel and Light.
		\$ cts.		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Florenceville.....	Carleton.	259 33	174	4,561 00	29 55	1,794 24	12 35	...	236 00	20 00	...
*Fredericton.....	York.	11,551 86	2,631	35,527 51	300 84	60,933 68	...	...	...	...	...
Fredericton Junction..	Sunbury.	330 35	52	800 96	6 85	862 07	3 08	...	95 00	8 00	...
Gagetown.....	Queen's	380 55	340	8,182 35	52 73	3,067 62	21 55	...	283 00	48 00	20 00
Grand Falls.....	Victoria.	719 82	370	8,407 44	57 32	1,685 61	22 16	4 52	250 00	52 00	...
Grand Manan.....	Charlotte.	431 26	424	8,051 53	61 68	2,402 11	22 34	...	150 00	16 00	...
Hampstead.....	Queen's	82 94	62	1,959 04	14 15	1,043 27	5 85	...	48 00	...	...
Hampton.....	King's	378 42	322	4,737 03	36 65	3,144 44	13 77	4 15	150 00	...	...
Harland.....	Carleton.	565 75	314	4,978 06	36 66	1,923 37	15 70	...	228 00	24 00	...
Harvey.....	Albert.	140 38	357	8,154 75	55 08	2,674 95	24 04	...	245 00	...	...
Harvey Station.....	York.	345 94	191	3,137 74	22 59	1,490 16	9 33	...	120 00	10 00	...
Hillsborough.....	Albert.	592 36	902	15,332 48	113 24	4,559 56	45 39	250 00	309 00	...	...
Hopewell Cape.....	do	275 78	218	2,621 11	21 62	3,429 14	8 16	...	100 00	12 00	...
Hoyt Station.....	Sunbury.	119 15	69	1,309 41	8 78	309 20	3 39	...	60 00	...	...
Indian Town.....	St. John.	1,562 08	591	10,302 22	80 26	2,914 84	28 45	54 69	575 00	...	80 00
Jacksonville.....	Carleton.	122 67	159	2,823 90	19 18	762 62	7 71	...	52 00	...	...
Kingsclear.....	York.	82 60	114	1,362 14	10 17	415 27	3 89	...	32 00	...	...
Kingston, Kent.....	Kent.	1,082 86	779	14,174 60	93 69	7,913 36	40 70	...	410 00	...	40 00
Kingston, King's.....	King's	92 26	43	1,011 52	9 36	489 77	3 38	0 57	102 00	...	...
Kintore.....	Victoria.	68 95	85	1,224 39	9 15	518 17	4 03	...	24 00	4 00	...
Kouchibouguac.....	Kent.	169 67	40	926 63	6 48	678 05	3 31	...	76 00	...	...
Lepreaux.....	Charlotte.	183 67	30	306 24	2 35	718 00	2 17	...	84 00	10 00	...
Markhamville.....	King's	107 92	21	432 95	3 19	273 86	1 53	...	44 00	...	...
Memramcook.....	Westmoreland.	268 88	254	5,417 07	36 32	5,976 05	17 35	...	114 00	14 00	...
Middle Sackville.....	do	479 83	197	2,489 65	17 68	270 82	6 30	...	144 00	...	...
Millerton.....	Northumberland.	265 61	438	6,797 66	47 12	575 53	17 37	...	96 00	...	...
Milltown.....	Charlotte.	702 17	327	3,174 87	33 03	982 82	9 10	8 05	340 00	...	40 00
Millville.....	York.	234 99	98	1,323 45	9 05	559 21	3 74	...	72 00	...	...
Moncton.....	Westmoreland.	10,404 25	6,207	80,006 48	642 13	59,755 29	220 38	400 00	2,400 00	100 00	...
Narrows.....	Queen's	162 80	160	3,772 53	25 74	993 63	10 72	...	240 00	100 00	...
Newcastle.....	Northumberland.	2,983 75	1,918	28,616 75	216 83	10,613 93	80 62	0 09	850 00	150 00	...
New Mills.....	Restigouche	482 46	118	1,505 67	11 19	1,154 91	3 92	...	132 00	10 00	...
Norton Station.....	King's	313 70	103	2,317 22	16 04	1,346 47	6 60	...	180 00	80 00	...
Oak Point.....	do	53 29	75	1,153 01	7 65	796 72	3 23	...	30 00	...	...
Oranmotto.....	Sunbury.	296 02	119	1,787 78	13 47	907 23	5 24	...	116 00	48 00	...
Ossekeag.....	King's	519 26	467	5,260 61	42 19	1,715 41	14 57	...	200 00	60 00	...



Penobscuis.....	do	306 43	255	4,270 55	32 09	3,259 60	11 64	.....	140 00	8 00	.....
Petitcodiac.....	Westmoreland.....	1,334 22	887	23,084 50	141 02	9,474 08	63 15	0 08	465 00	80 00	40 00
Gloucester.....	do	355 78	292	6,064 66	37 87	910 22	15 68	.....	163 00	.....	.....
+Port Elgin.....	Westmoreland.....	798 68	237	4,296 86	32 90	796 58	10 82	.....	220 00	60 00	.....
Portland.....	St. John.....	1,794 34	582	10,149 17	86 46	2,260 98	0 35	.....	480 00	.....	.....
Richibucto.....	Kent.....	903 14	801	14,749 34	100 88	5,682 71	42 14	27 16	360 00	40 00	40 00
Richmond Corner	Carleton.....	91 38	81	448 20	5 37	420 02	1 81	.....	36 00	8 00	.....
River Charlo.....	Restigouche.....	234 40	150	1,838 00	13 02	573 17	4 65	.....	100 00	8 00	.....
River Louisa.....	do	124 07	206	3,260 68	21 24	610 79	8 36	.....	48 00	.....	.....
Rockland.....	Westmoreland.....	74 85	26	215 35	2 19	435 89	1 28	.....	35 00	.....	.....
*Rogersville.....	Northumberland.....	415 97	8	154 07	1 41	37 45	0 39	.....	160 00	.....	.....
Rothsay.....	King's.....	524 28	114	1,554 60	14 46	703 30	4 88	2 50	186 00	24 00	.....
St. Andrews.....	Charlotte.....	1,778 20	891	11,915 81	100 67	8,259 03	37 44	.....	956 76	176 75	117 41
St. George.....	do	1,063 07	1,011	18,946 71	132 31	6,241 97	54 12	7 57	462 00	.....	40 00
*St. John.....	St. John.....	45,268 75	9,723	150,787 91	1,318 31	470,961 84	.....	.....	.....	.....	.....
St. Martin's.....	do	657 22	405	11,959 31	82 59	6,379 85	34 22	7 35	240 00	.....	.....
St. Stephen.....	Charlotte.....	4,687 13	1,880	23,613 60	186 95	18,195 25	67 54	88 82	1,200 00	120 00	.....
Sackville.....	Westmoreland.....	3,014 98	2,046	23,981 89	190 59	34,003 75	70 43	29 14	900 00	110 00	120 00
Salisbury.....	do	583 93	508	6,393 83	47 43	2,386 57	17 28	4 34	270 00	6 00	.....
Shediac.....	do	2,060 98	872	14,462 20	102 14	15,024 85	41 75	10 01	560 00	90 00	100 00
Sheffield.....	do	1110 00	222	7,393 63	44 10	4,633 47	18 89	.....	186 00	.....	.....
Shippigan.....	Sunbury.....	189 68	87	1,590 60	12 87	440 65	4 09	.....	93 00	20 00	.....
Springfield.....	Gloucester.....	237 64	197	4,435 60	32 44	1,876 92	13 12	.....	100 00	40 00	.....
Stanley.....	King's.....	222 69	244	3,254 06	24 61	1,632 67	9 01	.....	80 00	.....	.....
Sussex Vale.....	King's.....	2,180 67	1,690	22,023 06	174 44	18,433 07	66 16	0 33	680 00	100 00	.....
Tracadie.....	Gloucester.....	369 20	191	3,962 36	26 43	639 71	10 54	.....	140 00	.....	.....
Upham.....	King's.....	46 52	59	1,609 46	10 55	401 60	4 25	.....	16 00	.....	.....
Upper Gagetown.....	Queen's.....	110 02	234	4,787 27	31 68	514 76	12 70	.....	40 00	.....	.....
Weldford.....	Kent.....	734 93	905	17,101 59	113 72	2,712 10	44 56	.....	350 00	12 00	40 00
Walsford.....	Queen's.....	3,545 50	196	3,545 50	24 96	1,858 36	10 95	.....	108 00	10 00	.....
Woodstock.....	Carleton.....	5,040 38	2,367	27,805 68	240 59	26,289 47	84 35	.....	1,200 00	400 00	.....
Non-Accounting Post Offices.....	.....	35,776 66	.....	.....	.....	.....	.....	.....	18,897 53	582 00	40 00
Total.....	.....	170,556 49	61,703	978,129 70	7,447 63	941,931 15	2,234 29	932 16	45,044 29	3,673 75	937 41

\* Salaries, &c., entered in Auditor General's Report.

• Opened, 1st April, 1891.

+ Opened, 1st October, 1890.

WILLIAM WHITE,  
Deputy Postmaster-General.

W. H. SMITHSON,  
Accountant.

PROVINCE OF PRINCE EDWARD ISLAND

STATEMENT showing the Accounting Offices in operation; the gross Postal Revenue; the Number and Amount of Money Orders issued and paid; the Amount of Commission thereon; and the Compensation, Salary and Allowances paid to the Postmasters at each Office respectively, during the Year ended 30th June, 1891.

Name of Office.	County.	Gross Postal Revenue.	Number of Money Orders Issued.	Total Amount of Money Orders Issued.	Total Commission received from Public.	Total Amount of Money Orders Paid.	Com- pen- sation Paid to Post- masters on M. O. business.	Com- pen- sation Paid to Post- masters on S. B. business.	Salary.	Forward Allowance	Allowance towards Rent, Fuel and Light.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Alberton	Prince	1,090 64	446	8,708 50	60 97	8,541 76	37 03	0 25	360 00	17 50	40 00
*Charlottetown.	Queen's	13,290 11	3,809	53,720 60	484 68	78,866 59					
Georgetown.	King's	862 50	270	7,618 68	52 03	5,666 72	27 34	0 59	370 00	87 50	40 00
Kensington.	Prince	558 81	189	3,545 35	25 33	1,454 51	10 65	0 98	220 00	75 00	
Montague Bridge.	King's	785 06	564	14,991 39	96 10	10,151 63	55 14	0 83	320 00	100 00	
Murray Harbour	do	250 19	292	4,395 00	31 13	1,026 05	11 78		110 00	4 00	
Souris East.	do	1,203 36	472	7,195 74	55 25	10,384 48	37 89		420 00	90 00	40 00
Stanley Bridge.	Queen's	258 21	201	4,137 39	29 49	1,383 18	11 77	0 46	84 00		
Summerside.	Prince.	3,817 19	1,313	20,807 64	162 90	28,321 62	77 71		1,100 00	80 00	
Tignish	do	680 05	273	4,922 42	34 40	1,432 31	14 22	0 18	250 00	15 00	
Victoria	Queen's	225 33	255	7,749 86	48 75	2,221 83	21 30	0 33	90 00		
Non-Accounting Post Offices.		13,824 29							6,404 90	578 50	
Total.		36,845 74	8,084	137,792 57	1,081 03	149,450 68	304 83	3 62	9,728 90	1,047 50	120 00

\* Salary, &c., entered in Auditor-General's Report.

W. H. SMITHSON,  
Accountant.

WILLIAM WHITE,  
Deputy Postmaster-General.

## PROVINCE OF MANITOBA.

STATEMENT showing the Accounting Offices in operation; the gross Postal Revenue; the Number and Amount of Money Orders issued and paid; the Amount of Commission thereon; and the Compensation, Salary and Allowances paid to the Postmasters at each Office respectively, during the Year ended 30th June, 1891.

Name of Office.	County.	Gross Postal Revenue.	Number of Money Orders Issued.	Total Amount of Money Orders Issued.	Total Commission received from Public.	Total Amount of Money Orders Paid.	Com-pensation Paid to Post-masters on M.O. business.	Com-pensation Paid to Post-masters on S.B. business.	Salary.	Forward Allowance.	Allowance towards Rent, Fuel and Light.
		\$ cts.		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Arden Station.....	Marquette.	524 50	498	9,366 27	61 84	1,606 13	25 38	.....	120 00	.....	.....
Beulah.....	do	469 53	177	5,594 24	33 64	1,636 17	14 70	.....	140 00	12 00	.....
Binscarth.....	do	471 72	262	5,827 26	41 82	1,384 85	16 40	.....	200 00	87 50	.....
Birtle.....	do	1,377 97	640	12,281 74	91 78	11,090 44	39 90	3 58	580 00	48 00	70 00
Bossevain.....	Selkirk.	1,821 59	665	13,118 14	84 84	8,884 03	35 63	3 49	500 00	60 00	80 00
Brandon.....	do	12,222 24	3,118	55,332 40	433 56	44,043 16	167 01	2 69	2,400 00	300 00	360 00
Carberry.....	Marquette.	2,699 43	701	10,157 31	75 42	2,221 97	26 08	.....	500 00	50 00	80 00
Carmar.....	Selkirk.	1,296 80	705	18,650 58	120 05	6,567 57	47 47	.....	320 00	36 00	40 00
Deloraine.....	do	2,281 58	839	19,633 34	131 34	3,665 40	50 38	.....	590 00	110 00	80 00
Donnison City.....	Provencher.	519 35	402	9,209 44	60 97	2,409 68	24 31	0 04	190 00	.....	.....
Elkhorn.....	do	1,207 80	505	9,199 74	67 11	5,389 57	31 24	2 71	440 00	59 50	40 00
Emerson.....	Provencher.	1,200 77	790	16,629 00	115 86	3,886 31	42 99	2 39	465 00	96 00	50 00
Gladstone.....	Marquette.	1,110 61	898	24,519 78	152 63	4,837 16	24 00	0 88	360 00	12 00	40 00
Glenboro'.....	do	1,126 69	399	8,089 95	55 35	3,506 64	20 86	.....	360 00	36 00	40 00
Greta.....	Selkirk.	1,168 86	339	4,524 17	43 65	1,280 56	11 75	.....	380 00	40 00	40 00
* Griswold.....	do	1,211 71	340	11,286 31	69 65	1,566 06	28 61	.....	350 00	90 00	40 00
Holland.....	Marquette.	848 87	166	5,769 49	39 44	3,030 96	15 89	.....	240 00	.....	.....
Killarney.....	Selkirk.	1,057 05	772	14,285 68	94 48	3,627 87	38 08	.....	400 00	37 50	40 00
Manitou.....	do	1,879 74	1,090	19,672 80	135 36	8,213 83	36 69	1 23	560 00	108 00	80 00
+ McGregor Station.....	Marquette.	840 98	17	312 76	2 19	27 09	0 78	.....	250 00	8 00	.....
Minnedosa.....	do	2,420 54	1,155	17,348 63	135 90	12,203 71	55 92	5 15	680 00	28 50	100 00
Morden.....	Selkirk.	3,080 82	1,575	26,603 91	197 07	12,582 19	71 29	3 64	780 00	80 00	120 00
Morris.....	Provencher.	826 06	358	7,991 78	52 95	3,920 79	21 63	0 38	320 00	.....	.....
Neepawa.....	Marquette.	2,650 05	1,186	33,609 29	215 74	13,327 87	92 07	2 48	640 00	32 00	100 00
Newdale.....	do	403 40	248	6,254 06	38 99	834 39	16 24	.....	120 00	8 00	.....
+ Ninga.....	Selkirk.	451 18	151	5,300 99	31 05	429 05	13 32	.....	90 00	.....	.....
Pilot Mound.....	do	1,547 43	495	9,893 49	71 10	9,758 34	28 95	0 03	420 00	52 00	60 00
Portage la Prairie.....	Marquette.	8,115 49	2,484	39,553 50	316 68	25,972 88	109 60	14 26	1,760 00	65 00	280 00

\* Opened 2nd January, 1891.

+ Opened 1st April, 1891.

\* Opened 1st October, 1890.



STATEMENT showing the Accounting Offices in operation, &c., in Manitoba—Concluded.

Name of Office.	County.	Gross Postal Revenue.	Number of Money Orders Issued.	Total Amount of Money Orders Issued.	Total Commission received from Public.	Total Amount of Money Orders Paid.	Com-pensation Paid to Post-masters on M. O. business.	Com-pensation Paid to Post-masters on S. B. business.	Salary.	Forward Allowance.	Allowance towards Rent, Fuel and Light.
		\$ cts.		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	% cts.	% cts.	% cts.
Rapid City .....	Marquette .....	1,469 20	910	18,290 40	127 09	6,305 10	52 69	.....	465 00	.....	60 00
Russell .....	do .....	1,741 02	343	8,438 31	59 54	2,822 46	22 31	.....	240 00	25 00	.....
Selkirk .....	Lisgar .....	1,248 64	670	12,305 90	88 27	3,779 71	34 81	6 77	390 00	30 00	40 00
Shoal Lake .....	Marquette .....	1,096 52	160	3,695 58	25 29	1,920 31	10 11	.....	312 00	6 00	.....
Souris .....	Selkirk .....	2,094 30	1,120	32,679 27	204 57	5,081 74	83 87	.....	420 00	27 00	60 00
Stonewall .....	Lisgar .....	993 83	463	8,751 19	66 87	4,542 64	24 56	1 25	320 00	24 00	40 00
Vinden .....	Selkirk .....	3,220 41	1,356	32,922 83	214 62	12,536 72	88 87	0 51	740 00	30 00	120 00
§ Winnipeg .....	Lisgar .....	73,377 63	12,383	184,798 13	1,705 01	397,697 54	.....	.....	.....	.....	.....
Non-Accounting Post Offices .....	.....	29,218 69	.....	.....	.....	.....	.....	.....	11,765 31	440 00	40 00
Total .....	.....	168,302 00	38,380	721,877 66	5,464 72	636,710 89	1,484 39	51 48	28,807 31	2,038 00	2,100 00

§ Salary, &c., entered in Auditor-General's Report.

WILLIAM WHITE,  
Deputy Postmaster-General.

W. H. SMITHSON,  
Accountant.

## NORTH-WEST TERRITORIES.

STATEMENT showing the Accounting Offices in operation; the Gross Postal Revenue; the Number and Amount of Money Orders issued and Paid; the Amount of Commission thereon; and the Compensation, Salary and Allowances paid to the Postmasters at each Office respectively, during the year ended 30th June, 1891.

Name of Office.	Territory.	Gross Postal Revenue.	Number of Money Orders Issued.	Total Amount of Money Orders Issued.	Total Commission received from Public.	Total Amount of Money Orders Paid.	Com- pen- sation Paid to Post- masters on M. O. business.	Com- pen- sation Paid to Post- masters on S. B. business.	Salary.	Forward Allowance	Allowance towards Rent, Fuel and Light.
		\$ cts.		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Banff .....	Alberta .....	1,061 00	695	17,011 09	120 18	2,407 32	43 58	3 68	515 00	70 00	
Battleford .....	Saskatchewan .....	911 13	649	12,622 05	85 42	1,833 26	31 98		310 00	40 00	
Broadview .....	Assiniboia .....	656 62	162	3,826 61	28 76	4,043 87	13 91		320 00		
Calgary .....	Alberta .....	9,103 04	3,263	56,699 42	472 97	40,002 09	164 37	20 27	1,920 00	300 00	
Cannington Manor .....	Assiniboia .....	673 04	255	4,243 56	37 38	2,057 63	12 48		192 00		
Edmonton .....	Alberta .....	1,217 02	657	9,972 83	72 73	4,623 04	25 35		450 00	20 00	
Fort McLeod .....	do .....	1,736 34	1,195	27,888 37	200 05	6,217 95	73 63	4 90	570 00	40 00	
Fort Saskatchewan .....	do .....	287 45	250	6,572 01	40 56	1,513 73	16 62		108 00	19 50	
*Grenfell .....	Assiniboia .....	1,126 10	119	2,577 60	18 17	1,221 19	7 96		400 00		
Lethbridge .....	Alberta .....	3,781 20	3,452	73,509 46	602 11	8,045 31	188 17	19 06	660 00	80 00	
Maple Creek .....	Assiniboia .....	1,159 35	369	9,426 81	62 25	2,550 07	24 75	0 57	390 00		
Medicine Hat .....	do .....	1,688 82	935	20,082 42	156 88	5,583 53	53 51	2 83	450 00		
Moose Jaw .....	do .....	1,899 08	749	16,032 68	111 46	11,360 70	43 57	6 85	80 00		
Mossomin .....	do .....	2,725 21	885	18,248 16	133 69	12,978 72	57 30	2 00	740 00	200 00	
Pincher Creek .....	Alberta .....	620 62	283	5,143 40	39 93	1,619 29	13 77		180 00		
Prince Albert .....	Saskatchewan .....	2,057 80	863	20,734 88	140 34	7,448 26	54 51		560 00	24 00	
Qu'Appelle .....	Assiniboia .....	879 09	375	7,567 87	56 86	5,920 87	23 41		400 00		
Qu'Appelle Station .....	do .....	1,543 01	482	6,654 22	59 26	6,380 36	23 10	0 07	600 00	255 00	
Regina .....	do .....	7,284 43	1,578	33,447 17	253 90	25,531 57	94 28	4 06	1,900 00	210 00	320 00
Saltcoats .....	do .....	954 78	285	6,006 39	41 19	3,399 95	20 44		305 00	35 00	
Swift Current .....	do .....	504 76	233	3,578 05	32 01	184 38	9 18	0 12	180 00	74 00	
+Wapella .....	do .....	729 46	171	3,009 02	20 00	386 46	7 91		226 00	16 00	
Whitewood Station .....	do .....	1,162 22	515	14,319 80	96 21	7,345 60	45 44	1 04	400 00	100 00	40 00
Wolsley .....	do .....	623 54	214	4,333 82	31 24	4,758 83	18 43		300 00	46 25	
Non-Accounting Post Offices .....											
Total .....		14,161 58							5,271 63	135 00	40 00
		58,547 36	18,634	383,507 69	2,913 55	166,823 98	1,067 65	65 45	17,987 63	1,562 75	1,550 00

\*Opened 1st October, 1890.

+Opened 2nd January, 1891.

W. H. SMITHSON, Accountant. WILLIAM WHITE, Deputy Postmaster-General.

## PROVINCE OF BRITISH COLUMBIA.

STATEMENT showing the Accounting Offices in operation; the Gross Postal Revenue; the Number and Amount of Money Orders issued and paid; the Amount of Commission thereon; and the Compensation, Salary and Allowances paid to the Postmasters at each Office respectively, during the Year ended 30th June, 1891.

Name of Office.	County.	Gross Postal Revenue.		Number of Money Orders Issued.	Total Amount of Money Orders Issued.		Total Commission received from Public.		Total Amount of Money Orders Paid.		Compensation Paid to Postmasters on M. O. business.		Compensation Paid to Postmasters on S. B. business.		Salary.		Forward Allowance.		Allowance towards Rent, Fuel and Light.	
		\$	cts.		\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.
Ashcroft Station	Yale	642	04	648	18,151	47	118	38	10,119	13	46	84	1	42	270	00	120	00		
Barkerville	Cariboo	285	00	890	22,645	54	147	31	1,238	35	56	67			130	00	16	00		
Burgoyne Bay	Vancouver	110	45	76	1,103	83	10	38	829	72	2	76			40	00				
Chemainus	do	414	86	329	6,371	79	49	91	1,572	63	17	06			148	00				
Chilliwack	New Westminster	1,085	68	1,229	36,966	86	231	41	8,426	82	94	04	5	34	300	00				
Clinton	Cariboo	530	84	435	11,891	60	85	09	2,575	46	29	84			270	00	60	00	20	00
Comox	Vancouver	353	57	1,006	20,507	14	152	13	3,271	35	52	33	2	81	175	00				
Corfield	do	91	90	120	1,355	21	13	61	653	20	3	52			30	00				
Coutlee	Yale-Kootenay	144	04	120	2,623	49	17	88	1,186	29	6	31			50	00				
Donald	do	1,389	46	767	17,951	78	149	68	2,390	99	45	98			460	00			80	00
*Enderby	do	495	06	237	7,669	34	56	78	1,627	24	19	28			84	00				
+Esquimalt	Victoria	1,376	60	193	2,664	03	31	46	109	73	6	89			480	00			60	00
Hope	Yale	175	67	43	1,103	25	7	94	788	64	4	39			72	00				
Karloops	do	2,744	96	1,522	32,797	12	248	86	7,396	47	83	75	19	53	670	00	132	50	120	00
Ladner's Landing	New Westminster	397	09	354	21,635	10	155	20	7,088	40	55	11	0	06	300	00				
Langley	do	346	47	389	9,767	74	64	24	3,755	83	25	49			144	00				
Lulu Island	do	179	61	224	4,428	02	31	39	757	32	11	19			90	00				
Lytton	Yale	271	30	335	8,834	37	57	16	1,168	64	22	10			115	00				
*Matsqui	New Westminster	807	36	56	1,210	12	8	55	1,047	53	3	07			160	00	40	00		
Nanaimo	Vancouver	4,972	37	5,445	101,463	87	971	21	13,795	92	262	25	240	66	1,080	00				
New Westminster	do	10,897	72	5,253	98,649	27	820	07	58,746	70	256	78	78	92	1,900	00	425	00		
Nicola Lake	Yale	571	88	262	5,680	94	37	86	1,875	32	15	42			140	00				
Plummer Pass	Vancouver	203	68	199	1,551	87	15	93	312	37	4	04			52	00				
Port Hammond	New Westminster	283	96	342	4,545	95	36	89	1,765	79	12	06	1	09	100	00				
Quamichan	Victoria	278	47	264	3,346	19	31	57	2,693	43	11	20	0	12	152	00				
Quesselle	Cariboo	251	74	565	14,619	10	92	39	1,884	47	36	79			119	00				
Revelstoke	Yale-Kootenay	1,186	30	282	8,257	32	64	90	1,984	23	21	59			295	00	60	00		
Soda Creek	Cariboo	142	09	140	4,360	11	30	62	700	98	10	90			66	00				
Spence's Bridge	Yale	147	51	435	8,054	58	58	57	647	93	20	36			94	00	40	00		



Sumas	134 94	302	6,792 62	45 06	1,346 95	16 99	57 00	120 00	120 00
Vancouver	21,583 99	9,533	183,519 24	1,589 73	86,381 13	505 71	2,500 00	120 00	120 00
Victoria	36,757 51	13,942	232,527 95	2,262 96	159,894 89	100 65	300 00	120 00	120 00
Wellington	883 59	1,820	39,044 94	405 23	2,585 86	27 80	140 00	120 00	120 00
Yale	397 81	400	10,948 86	78 20	1,289 17	...	...	...	...
Non-Accounting Post Offices	15,737 57	...	...	...	...	...	4,928 00	148 00	...
Total	106,873 09	48,752	952,940 61	8,178 55	391,908 88	1,889 16	15,911 00	1,161 50	400 00

\* Opened 1st October, 1890.    + Opened 2nd January, 1891.    † Opened 1st April, 1891.    § Salary, &c., entered in Auditor-General's Report.

W. H. SMITHSON,  
Accountant.

WILLIAM WHITE,  
Deputy Postmaster-General.

STATEMENT (in accordance with the Act 52 Vic., Chap. 20, Sec. 12) of the Post Office Savings Bank transactions during the Year ended 30th June, 1891, and of the total amount due to Depositors on that date.

Balance due to depositors on 30th June, 1890.	21,900,633 49	Repayments to depositors during the year.	7,875,977 57
Deposits received during the year	6,500,372 00	Balance due to depositors on 30th June, 1891.	21,738,648 09
Amount of depositors' accounts transferred from closed agencies of the Dominion Government Savings Bank during the year.	389,169 28		
Interest allowed to depositors during the year in accordance with the Statute.	734,430 89		
	29,614 625 66		29,614,625 66

WILLIAM WHITE,  
*Deputy Postmaster-General.*

DAVID MATHESON,  
*Superintendent, Savings Bank Branch.*

ANALYSIS of the Money Order Business of the Dominion of Canada for the  
Year ended 30th June, 1891.

			No. of Orders.	\$ cts.	\$ cts.
Total amount of Money Orders issued in Ontario.....			477,424		6,036,938 44
do	do	Quebec.....	90,900		1,440,009 01
do	do	Nova Scotia.....	111,742		1,826,982 78
do	do	New Brunswick.....	61,703		978,129 70
do	do	Manitoba.....	38,380		721,877 66
do	do	North-West Territories	18,634		383,507 69
do	do	British Columbia.....	48,752		952,940 61
do	do	Prince Edward Island.	8,084		137,792 57
Total number and amount of Money Orders issued..			855,619		12,478,178 46
Total amount of Money Orders paid in Ontario.....				6,078,426 38	
do	do	Quebec.....		1,760,308 58	
do	do	Nova Scotia.....		1,698,274 35	
do	do	New Brunswick.....		941,931 15	
do	do	Manitoba.....		636,710 89	
do	do	North-West Territories.....		166,823 98	
do	do	British Columbia.....		391,908 88	
do	do	Prince Edward Island.....		149,450 68	11,823,834 89
Total amount of Money Orders issued and paid.....					24,302,013 35

WILLIAM WHITE,  
*Deputy Postmaster-General.*

W. H. SMITHSON,  
*Accountant.*



STATEMENT showing the losses sustained in collecting the Postal Revenue and conducting the Money Order and Savings Bank systems in the Dominion of Canada, brought to account during the Year ended 30th June, 1891.

	\$	cts.
Postage stamps destroyed by fire at Minden, Ont., on 28th July, 1890.....	6	44
Postage stamps destroyed by fire at Victoriaville, Que., on 25th July, 1889.....	8	00
Postage stamps destroyed by fire at Elmsdale, Ont., on 18th August, 1890.....	5	00
Postage stamps destroyed by fire at Wheatley, Ont., on 13th July, 1890.....	19	10
Postage stamps destroyed by fire at Fargo, Ont., on 29th September, 1890.....	18	00
Postage stamps destroyed by fire at Bullock's Corners, Ont., on 19th January, 1891.....	15	00
Postage stamps destroyed by fire at Eversley, Ont., on 23rd January, 1891.....	13	30
Postage stamps destroyed by fire at Starkville, Ont., on 18th January, 1891.....	6	00
Postage stamps stolen from Myrtle, Ont., July, 1890.....	44	00
Postage stamps stolen from Powassan, Ont., on 20th July, 1890.....	3	60
Postage, stamps stolen from Murvale, Ont., July, 1890.....	9	00
Postage stamps stolen from Coben, Ont., on 7th October, 1890.....	8	72
Postage stamps stolen from Willowdale, Ont., on 21st October, 1890.....	3	80
Postage stamps stolen from Sundridge, Ont., on 11th February, 1891.....	57	37
Post office funds lost in transmission from post office at Brockton, Ont., to Dominion Bank, Toronto, on 8th July, 1890.....	67	00
Postage stamps stolen from Burlington, Ont., March, 1891.....	5	00
Postage stamps stolen from Ravenswood, Ont., March, 1891.....	4	50
Postage stamps destroyed by fire at Bracebridge, Ont., March, 1891.....	1	09
Post office funds stolen from Brussels, Ont., on 3rd May, 1891.....	40	86
Post office funds destroyed by fire at Alliston, Ont., on 8th May, 1891.....	56	48
Total.....	\$392	26

WILLIAM WHITE,  
*Deputy Postmaster-General.*

W. H. SMITHSON,  
*Accountant.*

REPORT of all cases occurring within the Year ended 30th June, 1891, of abstraction from, or loss of, Letters containing Money, sent through the Post Office in Canada; showing the particulars of each case, and stating the result of the proceedings instituted therein by the Department.

## I.

## REGISTERED LETTERS.

No.	Name of Writer.	Where Mailed.	When Mailed.	Alleged Contents.	ADDRESS OF LETTER.		Evidence of Loss or Abstraction.	Result of Proceedings instituted in each case by the Department.	Class in Recapitulation.
					Name.	Place.			
1	Union Bank of Canada.	Lethbridge.	1890. July 5.	\$ 50 00 cts.	Rev. J. W. Douglas	Banff.	Stated not to have been received by the person addressed.	Evidence pointed to the conclusion that this letter had disappeared in the Banff Post Office. Postmaster was called upon to make good the loss, but failed to do so, and was some time later removed from office for other irregularities.	4
2	William Fisher.	Kagawong.	do 7.	3 00	Charles Stark.	Toronto.	do	The Postmaster of Kagawong, being unable to show that this letter was despatched from his office, made good contents.	3
3	A. E. Henderson.	Lockport, N.Y.	do 12.	7 00	Mrs. A. E. Henderson.	Brantford.	do	Mis-delivered by a clerk in the Brantford Post Office. Contents made good by Postmaster.	3
4	J. Maguire.	Coe Hill Mines.	do 18.	5 65	Hart Bros. & Lavier.	Belleville.	Only \$5.15 stated to have been received.	Loss made good by a clerk in the Belleville Post Office who failed to duly examine the registered package in which the letter was received at the Belleville office. Evidence pointed to the conclusion that these abstractions were committed at the St. André Avelin Post Office. Losses made good by Postmaster of that office. See cases Nos. 12 to 20, Class I.	5
5	H. Locas.	Cheneville.	do 12.	15 00	Grenier & Co.	Montreal.	Only \$10 stated to have been received.		5
6	S. Clontier.	Ottawa.	do 17.	5 00	Moïse Clontier.	St. André Avelin.	Stated to have been received without contents.		

I. REGISTERED LETTERS.—Report of all cases occurring within the Year ended 30th June, 1891, of abstraction from, or loss of, Letters containing Money, sent through the Post Office in Canada—*Continued.*

No.	Name of Writer.	Where Mailed.	When Mailed.	Alleged Contents.	ADDRESS OF LETTER.		Evidence of Loss or Abstraction.	Result of Proceedings instituted in each case by the Department.	Class in Recapitulation.
					Name.	Place.			
			1890.	\$ cts.					
7	F. Lafontaine. . .	Cheneville . . . .	July 19. . . .	45 00	Lacaille et Cie. . .	Montreal . . . . .	Only \$35 stated to have been received.	Evidence pointed to the conclusion that these abstractions were committed at the St. André Avelin Post Office. Losses made good by Postmaster of that office. <i>See</i> cases No. 12 to 20, Class I.	5
8	F. Frisit . . . . .	do . . . . .	do 19. . . . .	10 00	A. Sabourin . . . .	Casselman . . . . .	Only \$5 stated to have been received.		
9	H. Locas . . . . .	do . . . . .	do 26. . . . .	15 00	J. McCready & Co. .	Montreal . . . . .	Only \$10 stated to have been received.		
10	D. McGregor . . . .	Caledonia . . . . .	do 29. . . . .	34 13	Coulter & Goodman .	Cayuga . . . . .	Stated not to have been received by persons addressed	These two letters are stated to have been despatched from Caledonia to Cayuga on the date of posting. Enquiry failed to establish conclusively where the responsibility for their loss rested.	2
11	C. Morgan . . . . .	Port Dover . . . . .	do 29. . . . .	33 00	Grand River Plaster Co.	Gypsum Mines. . .			
12	E. S. Belisle. . . . .	Norman . . . . .	Aug. 5. . . . .	20 00	S. A. Belisle. . . . .	St. André Avelin . .	Only \$10 stated to have been received.	Evidence pointed to the conclusion that these abstractions were committed at the St. André Avelin Post Office. Losses made good by Postmaster of that office. <i>See</i> cases Nos. 5 to 9, Class I.	5
13	D. Duchesneau . . .	Hull . . . . .	do 8. . . . .	5 00	T. Traigner. . . . .	Namur. . . . .	Stated to have been received without contents.		
14	A. T. Smith . . . . .	Ste. Cunegonde. . .	do 8. . . . .	5 00	Mrs. A. T. Smith. . .	do . . . . .	Only \$1 stated to have been received.		
15	J. Farant . . . . .	Cheneville . . . . .	do 9. . . . .	2 00	L. Duhamel . . . . .	Hull . . . . .	do . . . . .		
16	Miss C. Couillard. . .	Ottawa . . . . .	do 20. . . . .	5 00	Jos. Major . . . . .	St. André Avelin . .	Stated to have been received without contents.		
17	Bank of Montreal. . .	Quebec. . . . .	do 21. . . . .	124 00	J. A. Dauvissant. . .	Ste. Emile de Suffolk.	Only \$116 stated to have been received.		



18	H. Locas . . . . .	Cheneville . . .	do	23..	26 00	McLary Mfg. Co., Montreal . . . . .	Only \$16 stated to have been received.	3
19	P. Rodier . . . . .	Rockland . . . . .	do	23..	1 00	W. Corbeille . . . . .	Stated to have been received without contents.	7
20	E. F. King . . . . .	Montreal . . . . .	do	29..	5 00	C. T. Plamondon . . .	Only \$1 stated to have been received.	3
21	Hannah McIntyre .	Lewiston, Me. . .	Aug. 8..	7 00	Angus D. McIntyre	Tignish, P.E.I. . . . .	This letter was misdelivered at the Tignish Post Office, and the Postmaster of that office made good contents.	7
22	E. H. Powell . . . .	Baie Verte, N.B. .	do	14..	25 00	C. R. Parish & Co. . . .	No evidence to account for the received without contents.	3
23	Miss C. E. Parker . .	Oak Hill, N.B. . .	do	15..	1 70	Wm. Briggs . . . . .	Stated not to have been received by the persons addressed.	These letters were contained in a registered packet, despatched from St. Stephen to St. John and Vanceboro' Railway Post Office on night of 15th August, 1890, which is stated not to have reached the latter office. Two officers of the Post Office who had neglected to comply with the prescribed routine in connection with these letters were held responsible for the loss, and made it good jointly.
24	M. Russell . . . . .	do . . . . .	do	15..	1 30	"Family Herald" . . . .		
25	Mr. Church . . . . .	Jonesport, Me. . .	do	15..	5 00	W. E. Church . . . . .		
26	G. R. McWha . . . .	St. Stephen, N.B. .	do	15..	2 00	D. C. Church . . . . .	do	8
27	. . . . .	Montreal . . . . .	do	16..	13 00	Miss J. L. Rooney . . .	do	7
28	W. E. Tookey . . . .	Sundridge . . . . .	do	18..	220 00	Plewes & Spence . . .	Only \$210 stated to have been received.	3
29	The Postmaster . . .	Horning's Mills. .	do	26..	10 00	Bank of Montreal . . .	Stated not to have been received by the person addressed.	7
30	W. E. Tookey . . . .	Sundridge . . . . .	do	27..	297 30	Plewes & Spence . . .	Only \$286.30 stated to have been received.	7

I. REGISTERED LETTERS.—Report of all cases occurring within the Year ended 30th June, 1891, of abstraction from, or loss of, Letters containing Money, sent through the Post Office in Canada—*Continued.*

No.	Name of Writer.	Where Mailed.	When Mailed.	Alleged Contents.	ADDRESS OF LETTER.		Evidence of Loss or Abstraction.	Result of Proceedings instituted in each case by the Department.	Class in Recaptulation.
					Name.	Place.			
31	W. Eager.....	Morrisburg....	1890. Aug. 28..	\$ cts. 1,030 40	John Stewart....	Felton.....	Only \$1,015.40 stated to have been received.	No evidence to account for the alleged discrepancy. Money had been placed in a very flimsy envelope, which was in bad order when received.	7
32	W. W. Pickett.....	St. Hyacinthe....	do 30..	232 32	Luc Gosselin.....	St. Fortunat....	Stated not to have been received by the person addressed.	This letter is believed to have been stolen from the mails whilst in charge of a railway mail clerk on the Montreal and Island Pond Railway. The clerk, who was intoxicated on the occasion, was removed from the service. The amount stolen was restored by the thief under the seal of the confessional.	3
33	H. Bouthillet.....	Ironville, Ohio..	Sept 2..	12 00	Dr. H. Bouthillet.	St. Sauveur....	Stated not to have been received by the persons addressed.	Stolen by Arthur Saucier a son of the Postmaster of St. Sauveur. Saucier was arrested, brought to trial and sentenced to 5 years in Penitentiary. Contents made good, partly out of the funds recovered from the prisoner, and partly by Postmaster, St. Sauveur.	3
34	Geo. Ray.....	Berthier en haut.	do 6..	40 00	J. H. Botterell....	do .....			
35	Cleophas Gagné....	Hochelaga.....	do 6..	5 00	Dame C. Gagné....	do .....			
36	Anna Brunelle....	Arthabaskaville.	do 6..	5 00	Dame W. Bourré..	do .....			
37	Mrs. E. Ramsay....	Montreal.....	do 3..	3 00	Miss Mary McLeod	Dunvegan.....	Stated to have been received without contents.	No evidence to account for the alleged discrepancy.	7
38	.....	Annapolis, N.S..	do 5..	50 00	Mde A. Fournier.	Grande Vallée..	Stated not to have been received by the person addressed.	The responsibility for the loss of this letter appeared to rest with the Postmaster of Fox River, who made good contents.	3
39	James Irwin....	Ravenna.....	do 12..	120 00	Joseph Best .....	Gore Bay....	Only \$100 stated to have been received.	No evidence to account for the alleged discrepancy.	7

40	The Postmaster...	Halifax.....	do	17..	2 00	The Postmaster...	River John Road	Stated not to have been received by the person addressed.	The Postmaster at Tatamagouche, having failed to continue the registration of this letter, made good contents.	3
41	.....	Richmond.....	do	18..	Ring valued at \$1.50.	Miss J. Dunboro..	Melbourne.....	do	These letters were stolen by burglars who entered the Melbourne Post Office on the night of 20th Sept., 1890. Contents made good by Postmaster of Melbourn, who had neglected to put the letters under lock and key.	8
42	P. Parent.....	Notre Dame du Sacré Cœur.	do	19..	60 00	Williamson & Crombie.	Kingsbury.....	do		3
43	Otis Hastings.....	Portage la Prairie.	do	23..	25 00	Mrs. Otis Hastings	Waterville, Que.	do	The contents of this letter were made good by a Railway Mail Clerk, upon whom the responsibility for its loss appeared to rest.	3
44	W. A. Ross.....	Wetzell, Mich...	do	30..	15 00	Mrs. W. A. Ross	Amfree, Ont...	do	The Postmaster of Stratford, having failed to continue the registration of this letter, made good contents.	3
45	R. B. Stryker.....	Parkdale.....	do	30..	1 00	Miss Lizzie Stryker	East Trenton, N. J.	Stated to have been received without contents.	No explanation of this loss could be obtained, but the amount contained in the letter was made good by a clerk in the Toronto Post Office, who had caused its detention and so exposed it to unnecessary risk.	5
46	Alex. Duff.....	Auburndale, Mass.	Oct.	8..	50 00	Miss M. B. Duff	Namur.....	Stated not to have been received by the person addressed.	The registration of this letter having been dropped at the St. André Avelin Post Office the Postmaster of that office made good the contents.	3
47	Wm. Reid.....	Lorneville, Ont.	do	10..	13 00	Alex. Lazarus...	Montreal.....	do	Contents made good by a Railway Mail Clerk who appeared to be responsible for the loss of the letter	3
48	T. J. Audette.....	Dept. Sec. State, Ottawa.	do	10..	1 00	A. A. Audet.....	do	Stated to have been received contents.	No evidence to account for the alleged discrepancy.	7
49	A. S. McPherson.	Wittenburg, N.S.	do	16..	5 00	K. W. Blackwell.	do	do	No evidence to account for the alleged discrepancy.	7
50	.....	Owen Sound....	do	21..	10 00	Chas. Burrows...	Woodstock, Ont.	Stated not to have been received by person addressed.	This letter was mis-delivered at Woodstock Post Office. Contents recovered from the party to whom the letter was wrongfully delivered.	3



I. REGISTERED LETTERS.—Report of all cases occurring within the Year ended 30th June, 1891, of abstraction from, or loss of, Letters containing Money, sent through the Post Office in Canada.—*Continued.*

No.	Name of Writer.	Where Mailed.	When Mailed.	Alleged Contents.	ADDRESS OF LETTER.		Evidence of Loss or Abstraction.	Result of Proceedings instituted in each case by the Department.	Class in Recapitulation.
					Name.	Place.			
51	Joseph Staples....	Victoria Road...	1890. Oct. 21..	\$ 30	Thomas Morton...	Sadowa....	Stated not to have been received by person addressed.	Stated to have been despatched from Sebright to Sadowa but to have failed to reach the latter office. The Postmaster of Sadowa, however, having neglected to report non-receipt of letter bill from Sebright, made good contents.	3
52	John Hodgson.....	St. Andrews, Man.	do 22..	5 00	Singer Sewing Machine Co.	Winnipeg .....	do	Contents made good by Postmaster of St. Andrews, who failed to enter the letter on letter bill of mail for Winnipeg by which it is stated to have been despatched.	3
53	Samuel Arthur.....	Sherbrooke.....	do 28..	4 00	Miss Emily Arthur	Hamilton. ....	Stated to have been received without contents.	No evidence to account for the alleged discrepancy.	7
54	Mrs. A. McAulay.	Warton.....	do 31..	10 00	Irwin Rusk. ....	Southampton, O.	Only \$5 stated to have been received.	No evidence to account for the alleged discrepancy.	7
55	A. Leblanc.....	Sudbury.....	Nov. 1..	25 00	Mr. Thos. Leblanc	St. Albert, Ont..	Only \$20 stated to have been received.	This abstraction is believed to have been committed by a dishonest assistant in the St. Albert Post Office, who fled the country before his arrest could be effected. Loss made good by the Postmaster of St. Albert.	5
56	H. Deroche.....	Waterbury .....	do 3..	10 00	Jos. Lafrance.....	Ste. Brigide .....	Stated to have been received without contents.	These abstractions were committed by ex-Railway Mail Clerk, Albert Houle, who, having	5
57	A. McKenzie.....	South Finch.....	do 4..	38 79	Granby Rubber Works.	Granby, Que....	do		

58	J. Trahan	do	10..	25 00	Caroline Souliere..	Chicopee Falls, Mass.	do	pleaded guilty to a charge of larceny, was sentenced to 23 months imprisonment. Losses made good out of funds handed over by Houle. See cases Nos. 74 to 76, Class I.	3
59	J. D. Landry	do	10..	25 00	Mrs. E. P. Rollins	Frost Village....	Only \$10 stated to have been received.		
60	E. Vaillancourt	do	18..	170 00	Payne Bros. & McFarlane.	Granby, Que...	Only \$70 stated to have been received.		
61	H. Bennett	do	4..	25 00	C. J. & F. W. Odell	Sherbrooke....	Stated not to have been received by the persons addressed.	There being no evidence of the despatch of this letter from the Desjardins' Post Office, the Postmaster of that office made good contents.	3
62	Mrs. C. J. Brownridge.	do	8..	13 65	William Hessin...	Toronto	Only \$10.65 stated to have been received.	No evidence to account for the alleged discrepancy. Cover of letter not preserved.	7
63	John Tanguay	do	11..	50 00	J. P. Cleary	Savage's Mills...	Only \$40 stated to have been received.		
64	F. Charbonneau	do	16..	20 63	Eastern Townships Bank.	Granby	Only \$15.63 stated to have been received.	These abstractions are believed to have been committed by a dishonest railway mail clerk no longer in the service of the Department. See cases Nos. 74 to 76, Class I.	6
65	F. W. Wallace	do	17..	37 00	Goodyear Rubber Co.	Montreal...	Only \$7 stated to have been received.		
66	L. Paradis	do	18..	22 00	John Doyle	Granby	Only \$10 stated to have been received.		
67	C. E. Bourne	do	25..	2 00	F. D. Suter	Dundas	Stated to have been received without contents.	No evidence to account for the alleged discrepancy.	7
68	Joseph Morency	do	27..	4 00	D. Drolet	St. Rochs.	Stated not to have been received by person addressed.	There being no evidence to show that this letter was despatched from the Etchemin Post Office, the Postmaster of that office made good contents.	3
69	Mary Lumsden	Dec.	2..	15 00	G. Lumsden	St. Pustache, Man.	do	The contents of this letter were made good by the Postmaster at Baie St. Paul, who accidentally threw the letter into the fire with some waste paper.	3
70	George Lake	do	4..	23 85	London Mutual Fire Ins. Co.	London	do	Stolen by the Postmaster of Tichborne, who absconded to the United States. Contents made good by Postmaster's wife.	3

I. REGISTERED LETTERS.—Report of all cases occurring within the Year ended 30th June, 1891, of abstraction from, or loss of, Letters containing Money, sent through the Post Office in Canada—*Continued.*

No.	Name of Writer.	Where Mailed.	When Mailed.	Alleged Contents.	ADDRESS OF LETTER.		Evidence of Loss or Abstraction.	Result of Proceedings instituted in each case by the Department.	Class in Recapitulation.
					Name.	Place.			
71	J. Jamieson .....	Holland, Man...	1890, Dec. 11..	\$ 10 00 cts.	Massey Mfg. Co...	Winnipeg...	Stated not to have been received by the person addressed.	There being no evidence to show that this letter was despatched from the Holland Post Office, the Postmaster of that office made good contents.	3
72	A. C. Gillissie .....	Chesterville .....	do 16..	26 12	John A. Paterson & Co.	Montreal...	Only \$16.12 stated to have been received.	No evidence to account for the alleged discrepancy. Cover of letter not preserved.	7
73	F. Vandrey .....	Roxton Pond...	do 17..	16 50	Banque de Hyacinthe.	St. St. Hyacinthe ..	Only \$6.50 stated to have been received.	Abstraction believed to have been committed by a dishonest railway mail clerk no longer in the service of the Department. See cases Nos. 74 to 76, Class I.	6
74	F. D. Whitehead..	Waterloo.....	do 17..	25 00	Beardmore & Co.	Toronto .....	Only \$15 stated to have been received.	These abstractions were committed by ex-Railway Mail Clerk Albert Houle, who was arrested, brought to trial, and sentenced to 23 months in jail. Losses made good out of funds recovered from Houle. See cases Nos. 56 to 60, 63 to 66 and 73.	5
75	Rev. J. A. Foisy ..	Roxton Pond...	do 17..	20 00	N. Beaugard...	St. Hyacinthe ..	Only \$10 stated to have been received.		
76	G. Roussin .....	Roxton Falls...	do 18.	337 50	Chas. R. Cousins...	St. Johns, Que..	Only \$327.50 stated to have been received.		
77	James Kidd .....	Deloraine .....	do 20..	10 00	Robert Wynn.....	Banff .....	Stated not to have been received by the person addressed.	This letter is believed to have been mislaid in the Banff Post Office. Contents made good by the Postmaster of that office.	3
78	Miss E. McVicar ..	Boston, Mass. ..	do 23..	10 00	Donald McVicar...	Enon, N.S. ....	do	The Postmaster at St. Peter's, N.S., having failed to continue the registration of this letter, made good contents.	3



79	L. W. J. Payment	Grande Frièrè	do	27..	20 00	Davis & Lawrence Co.	Montreal.....	do	..	This letter was lost by a letter carrier at Montreal, who made good contents.	3
80	.....	Lowell, Mass.	do	27..	15 00	Charles F. Orris...	Pearceton, Que..	do	..	This letter was mis-delivered at the Pearceston Post Office. The contents, however, were subsequently recovered and handed over to the addressee.	3
81	Mr. Surprenant...	Southbridge, Mass.	do	27..	15 00	Joseph Surprenant	St. Bernard Sud	do	..	The evidence in this case indicated that the letter was lost or mislaid at the St. Bernard Sud Post Office. Contents made good by the Postmaster of that office.	3
82	.....	Vernon, B.C.	Jan. 1..	1891.	15 00	W. F. Sheard.....	Livingstone, Mont.	{	{	These letters are believed to have been stolen from the steamer "Olympian" en route between Victoria and Port Townsend, by an employé of the contractors for the steamship mail service between these points, who escaped before he could be brought to justice. Contents made good by contractors.	8
83	R. Mason.....	Victoria, B.C.	do	3..	10 00	J. W. Adams.....	Seattle, Wash...				
84	G. B. Trites .....	do	do	3..	30 00	B. Trites.....	Roswell, N. M..				
85	J. Levy .....	Vancouver, B.C.	do	3..	15 00	F. W. Cook.....	Sumas City .....				
86	J. E. Mercile.....	Acton Vale.....	do	2..	18 03	Isidore Thibaudeau	Montreal.....	Statd not to have been received by the person addressed.	..	This letter disappeared in the Registration Branch of the Montreal Post Office. Contents made good by a clerk upon whom the responsibility for its loss appeared to rest.	3
87	John Halliday.....	Lyn.....	do	3..	100 00	Robertson, Linton & Co.	do	Stated to have been received without contents.	..	No evidence to account for the alleged discrepancy.	7
88	Edward Lucas .....	Argyle.....	do	2.	10 00	Noxon Mfg. Co....	Ingersoll .....	Stated not to have been received by the persons addressed.	..	The Postmaster of Ingersoll being unable to show how this letter was disposed of, made good contents.	3
89	W. G. Robinson & Cartwright, Man Co.	do	do	5..	48 75	Wm. Biggar & Son	Galt, Ont. ....	Only \$40.25 stated to have been received.	..	No evidence to account for the alleged discrepancy.	7
90	The Postmaster...	Rivière Boisclear	do	10..	8 80	P. G. Bussière.....	Quebec. ....	Stated not to have been received by the person addressed.	..	The responsibility for the loss of this letter appeared to rest with the Lotbinière Post Office. Contents made good by the Postmaster of that office.	3

I. REGISTERED LETTERS.—Report of all cases occurring within the Year ended 30th June, 1891, of abstractions from, or loss of, Letters containing Money, sent through the Post Office in Canada—*Continued.*

No.	Name of Writer.	Where Mailed.	When Mailed.	Alleged Contents.	ADDRESS OF LETTER.		Evidence of Loss or Abstraction.	Result of Proceedings instituted in each case by the Department.	Class in Recapitulation.
					Name.	Place.			
91		Ottawa	1891. Jan. 14	\$ 10 00 cts.	E. McConnell	Mattawa		This letter and a number of others (See cases 117 to 124) were rifled of their contents by burglars who entered the Mattawa Post Office on the night of 9th April, 1891. Loss made good by Postmaster of Mattawa who had neglected to put the letters under lock and key.	8
92	J. W. Adams	Centreville	do 16	10 00	Messrs. Vroom Bros.	St. Stephen, N.B.	Stated to have been received without contents.	No evidence to account for the alleged discrepancy.	7
93	J. Cornaughty	Frankford	do 17	37 00	J. H. Smith	Sundridge	Stated not to have been received by the person addressed.	The Sundridge Post Office was entered by burglars on the night of 11th February, 1891, and these letters stolen.	9
94	J. Harliburt	Bark's Falls	do 23	10 00	Alex. Wilson	Arnprior	do	This letter having been mis-delivered at the Arnprior Post Office, the Postmaster of that office made good contents.	3
95	A. Wilson	Tramore	do 24	15 00					
96	Wm. Clarke	Pense, Assa	do 25	4 25	T. Fleming	Summer berry, Assa.	do	This letter was duly received at the Summerberry Post Office. The Postmaster, being unable, however, to show how it was disposed of, made good contents.	3
97	John Reid	Elmvale	Feb. 2	0 75	John Pranby	Sundridge			
98	Bank of B. N. A.	Toronto	do 9	5 23	Van Mear & Bagshaw.	do			
99	F. A. Barr	Sundridge	do 10	1 00	Peruvian Remedy Co.	New York			
100	A. Moffatt	do	do 10	28 00	M. Moffatt	Warminster			
101	Henry Reaburn	do	do 11	6 00	Singer Mfg. Co.	Barrie			
102	J. C. Faulkner	do	do 11	11 75	W. F. Stewart	Toronto			
103	C. Cunningham	do	do 11	2 00	E. Handy	Emsdale		These letters were stolen by burglars who entered the Sundridge Post Office on the night of the 11th February, 1891.	9

104	A. Modeste.....	Warren.....	do	25..	4 00	B. Modeste.....	St. Alexis des Monts.....	Stated to have been received without contents.	No evidence to account for the alleged discrepancy.	7
105	Mr McLaren.....	Bassin du Lièvre	Mar.	2..	2 50	Mr. Albert Cooke.....	North Nation Mills.....	do	do	7
106	Phileas Frederick.....	St. John Sub.....	do	3..	1 00	S. E. Lefebvre.....	Montreal.....	do	do	7
107	Moise Pregent.....	Thurso.....	do	7..	27 00	J. E. Fontaine.....	Ornstown.....	Stated not to have been received by the person addressed.	This letter could not be traced beyond the Montreal Post Office. Enquiry, however, failed to fix the responsibility for its disappearance upon any particular officer.	4
108	E. J. Carter.....	Bond Head.....	do	13..	21 00	J. D. King & Co.....	Toronto.....	Only \$16 stated to have been received.	No evidence to account for the alleged discrepancy.	7
109	Miss D. M. Moray.....	Ottawa.....	do	20..	1 00	S. E. Lefebvre.....	Montreal.....	Stated to have been received without contents.	do	7
110	D. A. Ferguson.....	Meaford.....	do	20..	10 00	Rev. J. Ferguson.....	Richard's Landing.....	Only \$5 stated to have been received.	do	7
111	Alex. McCreagh.....	Sault Ste. Marie.....	do	21..	27 00	J. P. Rutherford.....	Rydal Bank.....	Only \$17 stated to have been received.	do	7
112	Boyd Bros.....	Bobcaygeon.....	do	24..	22 39	Daniel Sullivan.....	Kinmount.....	Stated not to have been received by the persons addressed.	Responsibility for the loss of these letters appeared to rest with the Postmaster of Lindsay who made good contents.	3
113	do	do	do	24..	32 24	Wm. Miller.....	Haliburton.....	do	Evidence points to the conclusion that this letter, which was duly entered on the letter bill of the mail from Lunenburg for Mahone Bay of 26th March, was probably stolen from the Lunenburg office before the despatch of the mail.	9
114	Peoples' Bank of Halifax.....	Lunenburg, N.S.	do	25..	1,500 00	Peoples' Bank of Halifax.....	Mahone Bay.....	do	This letter was contained in a mail bag stolen from the Richmond railway station on the night of the 27th March, 1891.	9
115	Rev. O. Manseau.....	L'Avenir.....	do	26..	20 00	Rev. F. A. St. Germain.....	Nicolet.....	do	No evidence to account for the alleged discrepancy.	7
116	John A. Rice.....	Binscarth.....	do	26..	63 80	Ephraim Rice.....	London, Ont.....	Only \$43.80 stated to have been received.	do	7
117	do	L'Original.....	April	4..	3 00	D. Fillion.....	Mattawa.....	do	These letters were stolen from the Mattawa Post Office by burglars on the night of the 9th April last. The Postmaster of Mattawa, having neglected to put the letters under lock and key, made good contents.	8
118	do	Baie des Pères.....	do	5..	11 50	P. Pigeon.....	do	do	do	8
119	do	do	do	5..	3 50	J. E. Benoit.....	do	do	do	8
120	do	Walford Station.....	do	7..	14 00	J. M. Deacon.....	do	do	do	8
121	do	Pembroke.....	do	7..	24 00	J. Commandante.....	do	do	do	8
122	do	Portage du Fort.....	do	7..	10 00	Eric McConnell.....	do	do	do	8
123	do	North Bay.....	do	9..	13 50	John Hayman.....	do	do	do	8
124	do	Chapleau.....	do	9..	15 00	D. H. Dunlop.....	do	do	do	8



I. REGISTERED LETTERS—Report of all cases occurring within the Year ended 30th June, 1891, of abstraction from, or loss of, Letters containing Money, sent through the Post Office in Canada—*Continued.*

No.	Name of Writer.	Where Mailed.	When Mailed.	Alleged Contents.	ADDRESS OF LETTER.		Evidence of Loss or Abstraction.	Result of Proceedings instituted in each case by the Department.	Class in Recapitulation.
					Name.	Place.			
			1891.	\$ cts.					
125	V. B. Whipple....	Hamilton .....	April 7..	10 00	Miller & Richards.	Toronto . . . . .	Stated not to have been received by the persons addressed.	These letters were lost by a Letter Carrier attached to the Toronto Post Office who made good contents.	3
126	C. H. Witham....	Hepworth .....	do 8..	3 70	Kilgour Bros.....	do . . . . .			
127	P. Shea.....	Gravenhurst....	do 11..	44 65	James Robinson ..	Montreal. ....			
128	Thomas Rogers....	Portland, Ont....	do 21..	21 47	William Campbell.	Tweed.....	Only \$4.65 stated to have been received.	No evidence to account for the alleged discrepancy.	7
129	W. R. Armstrong.	Cookstown.....	do 22..	51 00	Burk & Graham....	Alliston .....	Stated to have been received without contents.	do do	7
130	R. C. Brooks. . .	Ilfracombe.. . .	do 27..	70 00	Thomas Lowe. . . .	Barrie . . . . .	Only \$41 stated to have been received.	do do	7
131	Thomas Hinton....	Pincher Creek ..	do 28..	13 80	Sherlock, Freeman & Co.	Lethbridge. ....	Only \$65 stated to have been received.	do do	7
132	W. T. Whitely....	Clinton .....	May 1..	13 10	George Quinn. ....	Auburn.....	Only \$12.80 stated to have been received.	Cover of letter not preserved.	7
133	do	do	do 1..	12 80	George Rutledge	do	No evidence to account for the alleged discrepancy.	These letters were stolen by burglars who entered the Auburn Post Office on the night of the 6th of May last. The Postmaster, not having kept the letters under lock and key, made good the contents.	8
134	Mrs. Jno. Wagner.	Auburn .....	do 4..	105 50	Jacob H. Wagner.	do			
135	Alex. Gonill.....	Brussels .....	do 3..	13 00	Samuel Gonill .....	Vanderbilt, Mich	Stated not to have been received by the person addressed.	These letters were stolen by burglars, who entered the Brussels Post Office on the night of the May, 1891. Two men were arrested on a charge of having been implicated in this robbery, but were acquitted on trial.	9
136	Malcolm Black....	do	do 3..	29 00	Canada Permanent Loan Co.	Toronto .....			

137	W. F. Hatheway..	St. John, N. B.	do	5..	4 00	B. Meek .....	Virden, Man. ....	These letters were contained in a bag made up at Montreal for Port Arthur and Winnipeg Mail Clerks, on the 8th May, 1891, which was destroyed by the burning of a postal car near Straight Lake, on the night of the 9th May, 1891.	10
138	S. E. Lefebvre...	Montreal..	do	8..	10 00	R. Gibson .....	Nanaimo.....		
139	Merchants Bank..	do	do	8..	1,000 00	Commercial Bank.	Winnipeg..		
140	Bank of Montreal.	do	do	8..	10,000 00	Bank of Montreal.	Vancouver.....		
141	John White.....	Eastwood..	do	8..	8 00	Ed. Daly & Co. ....	Napancee..	Stated to have been received without contents.	7
142	L. H. Keating....	Barrie.....	do	9..	2 00	S. E. Lefebvre....	Montreal.....	Stated not to have been received by the person addressed.	3
143	Miss Charlebois..	Montreal..	May	9..	5 00	O. Charlebois.....	Nanur .....	Stated to have been received without contents.	11
144	Rev. H. MacLellan	Bruce Mines....	do	28..	111 34	D. H. MacLellan..	Montreal...	Only \$101.34 stated to have been received.	7
145	E. Tink .....	Myrtle .....	do	30..	14 00	George Gerow....	Claremont .....	do do	7
146	.....	Boston, Mass....	do	14..	10 00	Kenneth Brown...	Georgetown..	Stated to have been received without contents.	5
147	Maggie McInnis..	Roxbury, Mass.	June	16..	22 00	Mrs. John McInnis	do .....	These losses and abstractions are believed to have occurred whilst the mails containing these letters were lying over night at the house of the mail contractor for the Antigonish and Georgetown route. Amounts stolen made good by the contractor.	8
148	Nicholas Delaney.	Hyde Park, Mass	do	16.	15 00	Mrs. N. Delaney..	North Grant....	Stated not to have been received by the person addressed.	
149	do	Newton, Lower Falls, Mass.	do	16..	15 00	do	do	do	
150	Jessie Chisholm..	Boston.....	do	18..	8 00	Colin Chisholm...	do	do	
151	W. J. H. Adams..	Ottawa. ....	do	18..	50 00	Charles Kennedy..	Toronto .....	Stated to have been received without contents.	11
1	Edward Smith....	Port Alma.....	do	25..	150 00	C. G. Fox .....	Kingsville.....	Stated not to have been received by the person addressed.	2

I. REGISTERED LETTERS.—Report of all cases occurring within the Year ended 30th June, 1891, of abstraction from, or loss of, Letters containing Money, sent through the Post Office in Canada.—*Continued.*

No.	Name of Writer.	Where Mailed.	When Mailed.	Alleged Contents.	ADDRESS OF LETTER.		Evidence of Loss or Abstraction.	Result of Proceedings instituted in each case by the Department.	Class in Recapitulation.
					Name.	Place.			
153	R. B. Radmore...	Port Almo...	1891. June 25...	0 50	Empire Printing Co.	Toronto.	Stated to have been received without contents.	No evidence to account for the alleged discrepancy.	7
154	Goldwin Smith...	Toronto...	do 27...	2 00	D. Densmore...	Grand Valley...		Grand Valley Post Office entered by burglars on night of 28th June, 1891, and these letters stolen. The postmaster, having left the safe in which the letters were placed unlocked, made good the contents.	8
155	J. Godfrey.....	Belwood...	do 27...	3 75	J. & J. Graham...	do ..			



## I I.

REPORT of all cases occurring within the Year ended 30th June, 1891, of abstraction from, or loss of, Letters containing Money, sent through the Post Office in Canada.

## UNREGISTERED LETTERS.

No.	Name of Writer.	Where Mailed.	When Mailed.	Alleged Contents.	ADDRESS OF LETTER.		Evidence of Loss or Abstraction.	Result of Proceedings instituted in each case by the Department.	Class in Reconciliation.
					Name.	Place.			
1	Edouard Fluet...	St. Ferdinand...	1890. July 2.	\$ cts. 1 25	R. & J. McKenzie	Inverness	Stated not to have received by the person addressed.	No trace, owing to want of registration.	1
2	H. Munton	Guelph	do	7 29	J. D. Wells,	Toronto	do	do	
3	R. W. Smart...	Hanover	do	4 00	Mrs. R. W. Smart	Port Hope	do	do	
4	Mrs. Burdock	Peterboro'	do	4 00	Miss M. McManus	Toronto	do	do	
5	A. R. Finlayson	Localsh.	do	50 15	Jas. Witham & Co.	Montreal.	do	do	
6	Mrs. S. M. Bartley	Birtle	do	1 19	Mrs. H. Fooks	Winnipeg.	do	do	
7	Mrs. L. Lebel	Beaulieu	do	2 00	Mrs. Ledoux	St. Sauveur	do	do	
8	A. Hunter	Calgary	do	10 00	T. S. Taylor	Richwood.	do	do	
9	E. A. McAdso.	Cobourg Station.	do	2 00	Miss C. E. Wilkin-son.	Kingston.	do	do	
10	Alex. Vandette...	St. J. B. de Mont- real.	do	5 00	Mrs. A. Vandette.	Verner	do	do	
11	E. Laframboise...	Montreal	do	10 00	Mrs. Laframboise.	Billings' Bridge.	do	do	
12	R. C. George.	Kingston.	do	5 00	Laidlaw Mfg. Co.	Hamilton.	do	do	
13	Lizzie Beal.	Pembroke.	do	5 00	Mrs. C. Beal	Perth.	do	do	
14	Jas. H. Bennett.	Almonte	do	1 00	Miss Watson	Leitrim.	do	do	
15	R. M. Brown.	Winchester.	do	4 00	Mrs. R. M. Brown	Cummings Bridge.	do	do	
16	Miss McClenehan	London East	do	1 00	Miss M. McCle- ghan.	Granton	Stated to have been received without contents.	These abstractions are believed to have been committed by a youth employed as an assistant in the London East Post Office, against whom, however, the evidence was not sufficient to warrant prosecution. Losses made good by Postmaster of London East.	5
17	Miss Armstrong...	do	do	2 00	Mrs. W. S. Green- sides.	Mitchell			
18	J. G. Crewes...	Mattawa.	do	2 00	R. Philip & Co.	Toronto	Stated not to have received by the persons addressed.	No trace, owing to want of registration.	1

II. UNREGISTERED LETTERS.—Report of all cases occurring within the Year ended 30th June, 1891, of abstraction from, or loss of. Letters containing Money, sent through the Post Office in Canada—*Continued.*

No.	Name of Writer.	Where Mailed.	When Mailed.	Alleged Contents.	ADDRESS OF LETTER.		Evidence of Loss or Abstraction.	Result of Proceedings instituted in each case by the Department.	Class in Recapitulation.
					Name	Place.			
			1890.	\$ cts.					
19	George Chown	Frankford	July 9.	10 00	Edwin Chown	Kingston	Stated not to have been received by the person addressed.	No trace, owing to want of registration.	1
20	John Courtney	Brampton	do 9.	3 00	Mrs. J. Courtney	Dracon	do	do	
21	Payne Bros. & McFarlane.	Granby	do 9.	3 00	T. Crate	Kingston	do	do	
22	Miss Jennie Bower	Montreal	do 10.	5 00	Miss L. Bower	Toronto	do	do	
23	Mrs. F. Bartels	St. Hyacinthe	do 11.	25 00	Renaud, King & Patterson.	Toronto & Montreal.	do	do	
24	Thos. Gaviller	Beeton	do 11.	1 33	Philip Brown	Toronto	do	do	
25	Wm. McEvoy	Woodburn	do 11.	8 00	Professor Shaw	Guelph.	do	do	
26	G. Belanger	Ottawa	do 12.	3 00	Josephine Daoust	Bassin du Lièvre	do	do	
27	K. Brennan	North Bay	do 13.	3 00	Miss Josie Brennan	Merrickville	do	do	
28	J. B. Wetmore	Bloomfield Sta.	do 14.	3 00	The Mutual Relief Society.	Yarmouth, N.S.	do	do	
29	Brown Wallis	Ottawa	do 15.	1 50	Vivian Wallis	Toronto	do	do	
30	W. B. Robinson	Kingston	do 15.	15 00	Albert Pay	St. Catharines	do	do	
31	Alexandre Grenier	St. Philomène	do 15.	3 00	Alexandre Grenier	St. Sauveur.	do	do	
32	S. Solomon	Brantford	do 15.	3 00	Mrs. S. Solomon	Toronto	do	Possibly stolen by a dishonest Letter Carrier at Toronto. See Case No. 406.	4
33	Mary Evans	Qu'Appelle Sta.	do 16.	12 00	Mrs. Evans	Winnipeg	do	No trace, owing to want of registration.	
34	Mrs. F. St. Laurent	Quebec	do 16.	3 00	Horace St. Laurent	Quebec	do	do	
35	Wm. Dobson	Sundridge	do 16.	6 00	R. F. Killaly	Toronto	do	do	1
36	W. H. Ryerse	Port Ryerse	do 16.	6 00	Canadian Patent Brush Co.	Windsor	do	do	
37	Narcisse Papineau	St. Timothé	do 17.	15 00	Mrs. F. A. Mathieu	Montreal	do	do	
38	S. M. Davis	Montreal	do 17.	4 23	Mrs. S. M. Davis	Toronto	do	Possibly stolen by a dishonest Letter Carrier at Toronto. See Case No. 406, Class II.	4
39	W. L. Masales	Erin	do 17.	16 05	F. W. Flett	do	do	do	

40	Neil Kay.....	Walkerton.....	do	18..	13 00	W. L. Kay.....	Red Bay.....	do	No trace, owing to want of registration.	1
41	J. Redmond.....	Lausdowne.....	do	19..	12 01	R. Carson.....	Kingston.....	do	do	
42	T. S. Gray.....	Beausejour.....	do	20..	25 00	W. D. Pettigrew & Co.....	Winnipeg.....	do	do	
43	C. Edwards.....	Halifax.....	do	21..	1 00	"Delineator" Pub. Co.....	Toronto.....	do	do	
44	R. McPaul.....	Kingston.....	do	21..	9 60	Central Agency.....	Montreal.....	do	do	
45	Miss Mary Scott.....	Pitt's Ferry.....	do	22..	2 00	Miss E. Scott.....	Mallorytown.....	Stated to have been received without contents.	No evidence to account for the alleged discrepancy.	7
46	Mrs. Eliza Mead.....	Thamesville.....	do	23..	12 00	A. R. Mead.....	Windsor.....	Stated not to have been received by the person addressed.	No trace, owing to want of registration.	
47	H. W. Hunt.....	Sharbot Lake.....	do	24..	7 48	Chase Bros. & Co.....	Collborne.....	do	do	
48	Dr. Harvie.....	Winnipeg.....	do	25..	20 00	Miss R. A. Harvie.....	Windsor, Ont.....	do	do	
49	James Nesbitt.....	Ross Mount.....	do	25..	5 00	Margaret Nesbitt.....	Blairhampton.....	do	do	
50	H. Vernon.....	Kingston.....	do	26..	13 00	Mrs. H. Vernon.....	Hamilton.....	do	do	
51	W. H. Huck.....	Mildmay.....	do	26..	1 10	R. Meek.....	Kingston.....	do	do	
52	F. Briere.....	Montreal.....	do	27..	1 00	Mrs. X. Viger.....	St. Sauveur.....	do	do	
53	A. Berthelot.....	St. Laurent.....	do	28..	10 00	A. Renaud.....	St. Rose.....	do	do	
54	H. Smith.....	Morden.....	do	28..	4 00	Miss A. Smith.....	Winnipeg.....	do	do	
55	John Winton.....	St. Jean Baptiste.....	do	28..	3 00	A. R. McNichol.....	do	do	do	
56	Samuel Boreham.....	Halifax.....	do	28..	2 00	Mrs. A. Boreham.....	Mahone Bay.....	do	do	
57	W. McDermott.....	Gagetown.....	do	28..	3 00	J. & A. McMillan.....	St. John.....	do	do	
58	R. Hutchison.....	Chatham, N.B.....	do	29..	10 70	John Mackay.....	do	do	do	
59	Mary Pyncheon.....	Montreal.....	do	29..	6 00	Mrs. E. Pyncheon.....	Etchemin.....	do	do	
60	J. M. Culp.....	Guelph.....	do	30..	15 00	A. E. Sinasc.....	Harrow.....	do	do	
61	Michael Coffey.....	St. John.....	do	31..	1 00	Montreal "Star".....	Montreal.....	do	do	
62	Mrs. Houle.....	Montreal.....	do	31..	10 00	Paul Villeneuve.....	Malbate.....	do	do	
63	Marie Demers.....	Stanford.....	Aug.	1..	2 05	A. J. Boucher.....	Montreal.....	do	do	
64	L. D. Morin.....	Quebec.....	do	1..	1 35	Jeanotte & Hébert.....	do	do	do	
65	S. W. Abbott.....	Toronto.....	do	2..	2 00	Miss Mabel Abbott.....	Kingston.....	do	do	
66	James Gordon.....	Clavering Railway Station.....	do	2..	2 00	"Free Press".....	London.....	do	do	
67	J. J. Johnston.....	Walkerton Railway Station.....	do	4..	3 00	Mrs. J. J. Johnston.....	Meaford.....	do	do	
68	Miss F. Bate.....	South Cayuga.....	do	4..	35 00	W. A. Murray & Co.....	Toronto.....	do	do	
69	C. Kent.....	Jocelyn.....	do	4..	1 00	"Free Press" Printing Co.....	London.....	do	do	
70	Mrs. Boyd.....	Morden.....	do	4..	4 00	Mrs. C. Jarvis.....	Winnipeg.....	do	do	
71	W. A. Piper.....	Leamington.....	do	5..	5 00	Burns & Bapty.....	London.....	do	do	
72	J. W. Borsberry.....	Cannington.....	do	6..	17 82	Burgoyne & Co.....	Fenelon Falls.....	do	do	
73	E. Thompson.....	Quebec & Three Rivers Postal Car.....	do	6..	200 00	H. L. Thompson.....	Peterboro'.....	do	do	
74	Mrs. Martha Carroll.....	Anthracite.....	do	6..	12 00	J. F. Carroll.....	Calgary.....	do	Stolen by the Postmaster of Anthracite who confessed the theft, but who, having retracted his confession, was acquitted on trial.	4



II.—UNREGISTERED LETTERS.—Report of all cases occurring within the Year ended 30th June, 1891, of abstraction from, or loss of, Letters containing Money sent through the Post Office in Canada—*Continued.*

No.	Name of Writer.	Where Mailed.	When Mailed.	Alleged Contents.	ADDRESS OF LETTER.		Evidence of Loss or Abstraction.	Result of Proceedings instituted in each case by the Department.	Class in Reapitulation.
					Name.	Place.			
			1890.	\$ cts.					
75	Rev. N. S. Burwash	Allenford.	Aug. 6..	5 00	Miss Eva Burwash	Barrie.	Stated to have been received without contents.	No evidence to account for the alleged discrepancy.	7
76	Mary Knechtel.	Hanover.	do	10 00	J. S. Knechtel.	Marieville, Que.	Stated not to have been received by the person addressed.	No trace, owing to want of registration.	1
77	Elizabeth Conway.	Huntsville.	do	7 00	John Taylor	Warsaw.	do	do	do
78	R. Wootton.	Mount Brydges.	do	1 00	"Free Press" Printing Co.	London.	do	do	do
79	P. Hammill.	Bell's Corners.	do	8 00	S. Burns.	do	do	do	do
80	Mrs. Challes.	Napanee.	do	0 50	Geo. Jellewre.	Waterloo.	Stated to have been received without contents.	No evidence to account for the alleged discrepancy.	7
81	John Burrell.	Montreal.	do	10 00	Rev. W. Wells.	Shawville.	Stated not to have been received by the person addressed.	No trace, owing to want of registration.	1
82	Mrs. E. de Belle-famille.	St. Eustache.	do	5 00	Mrs. D. McDonald	Prescott.	do	do	do
83	H. Schlegel.	Bamberg.	do	2 70	J. B. Armstrong Mfg. Co.	Guelph.	do	do	do
84	F. Hassold.	Portsmouth.	do	2 50	Pittaway & Jarvis.	Ottawa.	do	do	do
85	M. A. Connell.	St. Hyacinthe.	do	10 00	E. O. Rondeau & Cie.	Sorel.	do	do	do
86	J. B. Luckeroff.	Three Rivers.	do	7 00	Damaso Bessette.	Montreal.	do	do	do
87	A. T. Kilburn.	West Sheffield.	do	42 00	C. R. Cousins.	St. Johns.	do	do	do
88	G. Badgley.	Toronto (Postal Car).	do	4 00	Mrs. G. Badgley.	Sterling.	do	do	do
89	B. Hare.	Kingston.	do	4 00	Miss Mabel Hare.	Fenwick.	do	do	do
90	J. A. McTaggart.	Maidstone.	do	20 00	A. McTaggart.	Appin.	do	do	do
91	Chas. Laliberté.	Acton Vale (Railway Station).	do	4 70	L. H. Bernard.	Drummondville.	do	do	do
92	Luella Fairbairn.	Spencerville.	do	1 70	W. H. Billings.	Toronto.	do	do	do
93	H. McLean.	Hawkesbury.	do	8 25	R. Scott.	Galt.	do	do	do

94	D. Gillis.....	Muirkirk.....	do	13..	16 35	Hobbs, Osborn & London.....	do	do	do	1
95	Miss Skerratt .....	Toronto .....	do	14..	5 00	Hobbs .....	do	do	do	
96	Alfred Fortin .....	Montreal.....	do	14..	10 00	Thos. Skerratt.....	do	do	do	
97	W. R. Baker .....	Owen Sound.....	do	14..	5 00	Mrs. A. Fortin.....	do	do	do	
98	James Brend .....	Brooklyn.....	do	15..	1 00	D. A. Jones .....	do	do	do	
99	L. G. Ramsey .....	Stuartburn .....	do	15..	2 00	Mary Brend.....	do	do	do	
100	Elizabeth Forbes.....	Winnipeg.....	do	16..	1 00	Mrs. L. G. Ramsey .....	do	do	do	
101	Lizzie Whelan.....	Belleville.....	do	16..	2 00	A. A. Audet.....	do	do	do	
102	R. B. Linton.....	Port Elgin.....	do	17..	1 30	Mrs. Cassidy.....	do	do	do	
103	Mrs. J. F. Cross.....	Toronto.....	do	18..	0 50	Miss Flor. Linton.....	do	do	do	
104	B. C. Munro .....	Amherst, N.S.....	do	19..	1 00	J. F. Cross.....	do	do	do	
105	Mrs. Donovan .....	Hamilton .....	Aug.	19..	5 15	"Delineator" Pub. Co.....	do	do	do	
106	Dr. White.....	Toronto.....	do	20..	0 25	Sisters of Mercy.....	do	do	do	
107	A. Gilchrist .....	West Toronto .....	do	20..	0 25	Johnnie Otto.....	do	do	do	
108	J. Murphy.....	Junction.....	do	20..	1 00	do .....	do	do	do	
109	Donald Clark.....	Sarnia.....	do	20..	1 00	"Free Press" Printing Co.....	do	do	do	
110	Mrs. W. R. Howland.....	St. Andrews, N.B.....	do	21..	9 06	Joseph Bullock.....	do	do	do	
111	John Blacklock.....	Beausjour (postal car).....	do	21..	2 00	H. S. Rogers.....	do	do	do	
112	F. F. Bruneau.....	Vernonville .....	do	22..	10 00	J. Muckleston & Co.....	do	do	do	
113	Mrs. D. C. Firth.....	Joliette.....	do	22..	3 00	Mrs. F. F. Bruneau .....	do	do	do	
114	P. Bates.....	Campbilton, N.B.....	do	23..	1 00	"Delineator" Publishing Co.....	do	do	do	
115	Mrs. R. Robinson.....	Souhampton (postal car).....	do	23..	20 00	Mrs. P. M. Bates.....	do	do	do	
116	E. Manley.....	Preston.....	do	23..	20 00	Mrs. S. B. Clark.....	do	do	do	
117	N. H. Greenway .....	Alliston.....	do	25..	2 00	Robert Robinson.....	do	do	do	
118	L. Weller.....	Tidnish, N.S.....	do	25..	10 00	Mrs. E. Manley.....	do	do	do	
119	The Postmaster .....	Crystal City.....	do	25..	1 00	C. F. Strubbs .....	do	do	do	
120	James Walkley.....	Zephyr.....	do	26..	0 15	John Douglas.....	do	do	do	
121	Miss L. West.....	Prince Albert.....	do	26..	20 00	Mrs. Pendygrasse.....	do	do	do	
122	James Walkley.....	Hornings Mills .....	do	26..	10 00	Bank of Montreal.....	do	do	do	
123	Miss Sarah Cluff.....	Toronto.....	do	27..	5 00	Miss Lucy West.....	do	do	do	
124	Miss Sarah Cluff.....	Selkirk.....	do	27..	3 50	W. D. Pettigrew & Co.....	do	do	do	
125	Jos. W. Parker.....	Seaforth (postal car).....	do	27..	10 00	N. T. Cluff.....	do	do	do	
126	W. R. Ward.....	Toronto (Spadina Avenue).....	do	30..	1 00	H. Walker.....	do	do	do	
127	R. Lynch.....	Magog.....	Sept.	1..	10 00	W. S. Dresser.....	do	do	do	
128	C. F. Bridgman.....	Montreal.....	do	1..	2 50	B. J. Leubsdorf.....	do	do	do	
129	S. E. Slaght.....	Winnipeg (Railway Station).....	do	1..	16 00	S. DesBrisay.....	do	do	do	
171		Waterford.....	do	1..	25 00	Mrs. S. E. Slaght.....	do	do	do	

II. UNREGISTERED LETTERS.—Report of all cases occurring within the Year ended 30th June, 1891, of abstraction from, or loss of, Letters containing Money, sent through the Post Office in Canada—*Continued.*

No.	Name of Writer.	Where Mailed.	When Mailed.	Alleged Contents.	ADDRESS OF LETTER.		Evidence of Loss or Abstraction.	Result of Proceedings instituted in each case by the Department.	Class in Recapitulation.
					Name.	Place.			
130	J. Gibson.	Sproat, B.C.	Sept. 1..	5 00	Mrs. John Alling-ham.	Winnipeg.	Stated not to have been received by the person addressed.	No trace, owing to want of registration.	1
131	D. Luoney.	Belleville.	do 1..	5 00	Mrs. D. Luoney.	Kingston.	do	do	3
132	S. W. Bodley.	Victoria, B.C.	do 2..	20 00	Mrs. Bodley.	Toronto.	do	do	
133	François Martel.	Baillargeon.	do 2..	13 00	Thomas Drolet.	Ancienne Lorette	do	Posted for registration but the Postmaster of Baillargeon having omitted registration made good contents.	
134	J. W. Fullbrook.	Stonewall	do 3..	25 35	M. Hughes & Co.	Winnipeg.	do	No trace, owing to want of registration.	
135	J. C. Dunlop.	Toronto.	do 5..	5 00	Rev. J. Senior.	Danford Lake.	do	do	
136	R. McLeod.	Tilbury Centre.	do 6..	5 00	Mrs. McLeod.	Toronto	do	do	
137	do	do	do 6..	2 00	do	London.	do	do	
138	John McPherson.	Ridgetown.	do 8..	10 94	D. M. Ferry.	Windsor.	do	do	
139	E. G. Brown.	Headingley	do 9..	4 00	Miss Lottie Brown	Winnipeg.	do	do	
140	T. E. Anderson.	Napance.	do 9..	3 00	J. L. Nicoll.	Cataraqui	do	do	
141	Levi Weese.	Belleville.	do 10.	0 25	Mrs. Weese.	Kingston.	do	do	
142	T. S. Gray.	Beausejour.	do 10.	2 00	Miss Mabel Grey.	Winnipeg	do	do	
143	Mrs. R. Gibson.	Lethbridge.	do 10.	2 00	C. Wellband	do	do	do	
144	Frank Jackson.	St. Thomas.	do 10.	10 00	Jas. Jackson.	Wardsville	do	do	
145	W. Keatley.	Ashcroft Station	do 10.	10 00	Hon. T. Davie.	Victoria, B.C.	do	do	
146	Hattie Reising.	Elmira.	do 10.	2 00	Miss Rose Reising.	St. Sauveur.	do	do	
147	J. L. Drainie.	Fergus.	do 12.	6 60	Sanderson, Percy & Co.	Toronto	do	do	1
148	D. J. Smith.	Toronto	do 12.	9 00	Mrs. D. J. Smith.	Kingston.	do	do	
149	Mrs. W. Hutchison.	LeBreton Flats.	do 12.	4 50	H. Morgan & Co.	Montreal.	do	do	
150	R. B. Herriman.	Rat Portage (Postal Car.)	do 13.	7 00	Mrs. R. B. Herriman.	Winnipeg	do	do	
151	Alfred Fortin.	Montreal.	do 14.	10 00	Dame A. Fortin.	Baie St. Paul.	do	do	
152	McCabe & Co.	Toronto	do 14.	10 00	Jessie Devany.	Montreal.	do	do	
153	Miss Ada Robb.	Wyoming.	do 16.	5 00	Miss Annie M. Lancaster.	Toronto	do	do	
154	W. F. Green.	Brandon	do 16.	10 00	Mrs. W. F. Green.	Winnipeg.	do	do	



153	George Evans.....	Bright..	do	16..	25 00	Sanderson, Pearcey & Co.	Toronto	do	..	Possibly stolen by a dishonest Letter Carrier at Toronto. See Case No. 406, Class II.	4
156	T. Redmond.....	Rat Portage	do	17..	40 00	Mrs. Mary Redmond.	Winnipeg.	do	..	No trace, owing to want of registration.	1
157	Mrs. G. Hamblly..	Campbellford	do	18..	10 00	Miss Rockfort	Toronto	do	..	do	..
158	John Jones.....	Sudbury	do	18..	5 00	Mrs. C. Jones.	Kingston	do	..	do	..
159	J. Dier.....	Westport	do	18..	2 00	Guelph Carriage Goods Co.	Guelph	do	..	do	..
160	T. S. Armstrong..	Fergus	do	19..	4 40	E. T. Corset Co.	Toronto	do	..	Possibly stolen by a dishonest Letter Carrier at Toronto. See Case No. 406, Class II.	4
161	J. H. Steele.....	do	do	19..	8 50	Olmsted & Co.	do	do	..	do	..
162	D. Valentine.....	Coe Hill Mines.	do	20..	3 00	Miss J. Simpson.	Lavant	do	..	No trace, owing to want of registration.	1
163	Sam Kavanagh.....	North Bay	do	22..	10 00	Mrs. S. Kavanagh.	Tottenham	do	..	do	..
164	F. Jellis.....	Kingston	do	22..	5 00	Mrs. F. Jellis.	Ottawa	do	..	do	..
165	Thos. Langrill.....	Ottawa	do	23..	15 00	Mrs. Kerr	Bensfort	do	..	do	..
166	Mrs. R. A. Mathe-son.	Maxville	do	23..	1 00	Mrs. N. Cornish	Toronto	do	..	Possibly stolen by a dishonest Letter Carrier at Toronto. See Case No. 406, Class II.	4
167	Mrs. Sylvester.....	Rosenfeld Junct. (Postal Car.)	do	24..	15 00	Mr. Hone.	Winnipeg.	do	..	No trace, owing to want of registration.	1
168	Mrs. R. A. Mathe-son.	Maxville	do	24..	2 06	Mrs. T. O. Cornish	Toronto	do	..	Possibly stolen by a dishonest Letter Carrier at Toronto. See Case No. 406, Class II.	4
169	Mrs. J. McElroy..	Blythe	do	24..	13 00	Jas. Lumbers.	do	do	..	No trace, owing to want of registration.	1
170	Emma Tipling.....	Clinton	do	25..	3 00	Geo. H. Tipling.	Toronto	do	..	do	..
171	D. Fraser.....	Kingston	do	26..	9 00	Mrs. D. Fraser	do	do	..	do	..
172	Capt. Vandusen.....	do	do	26..	10 00	Mrs. Vandusen	Point Traverse.	do	..	do	..
173	Sieur Marie Eudoxie.	Ste. Anne des Plaines.	do	26..	27 24	A. Archambault	Montreal	do	..	do	..
174	Peter Bennett.....	Regina	do	26..	10 00	Mrs. C. Willoughby	Almonte	do	..	do	..
175	John Bennett.....	Toronto	do	27..	10 00	Mrs. P. Bennett	Indian River	do	..	do	..
176	John Brisbois.....	Ottawa	do	27..	15 00	J. B. Brisbois.	North Plantagenet.	do	..	do	..
177	Miss S. Clarke.....	Granton	do	27..	3 00	Samuel Clarke	Windsor	do	..	do	..
178	Joseph Belcour.....	Port Arthur	do	28..	20 00	Louise Belcour	Stirling	do	..	do	..
179	C. Merriam.....	Huntsville	do	28..	5 04	Mrs. C. Merriam	Harwood	do	..	do	..
180	J. G. Ramsay.....	do	do	28..	10 00	Mrs. M. Fox	Orillia	do	..	do	..
181	George Hughes.....	Mount Forest	do	28..	5 00	Mrs. Geo. Hughes	Toronto	do	..	do	..
182	Mrs. E. Barrette..	Montreal	do	29..	4 40	Mrs. L. Filabreault	Laurentides	do	..	do	..
183	Miss Code.....	Peterborough	do	30..	3 20	Miss L. Goulding	Haydon	do	..	do	..
184	Mrs. M. A. Corbett	Mount Forest	do	30..	8 25	McColl Bros.	Toronto	do	..	Possibly stolen by a dishonest Letter Carrier at Toronto. See Case No. 406, Class II.	4
185	J. M. Cullen.....	Huntsville	do	30..	5 00	Mrs. Jno. Cullen	Fenelon Falls	do	..	do	..
186	D. Morrison.....	Wakefield	Oct. 1..		5 00	Mrs. D. Morrison	Ottawa	do	..	No trace, owing to want of registration.	1

II. UNREGISTERED LETTERS.—Report of all cases occurring within the Year ended 30th June, 1891, of abstraction from, or loss of, Letters containing Money, sent through the Post Office in Canada—*Continued.*

No.	Name of Writer.	Where Mailed.	When Mailed.	Alleged Contents.	ADDRESS OF LETTER.		Evidence of Loss or Abstraction.	Result of Proceedings instituted in each case by the Department.	Class in Recapitulation.
					Name.	Place.			
187	Wilson Cook	Varna	1890. Oct. 1.	\$ cts. 3 60	W. O. Marrin	Parkhill	Stated not to have been received by the person addressed.	No trace, owing to want of registration.	
188	Mrs. Glaeken	Toronto	do 1.	3 30	Mrs. G. McEachern	Bolsover	do	do	
189	Kate Enright	do	do 2.	2 00	Mrs. Thos. Enright	Kingsville	do	do	
190	Jas. Eggett	London	do 2.	1 00	Horne Knowledge Association.	Toronto	do	do	
191	George Comper	Guelph	do 3.	2 00	Mrs. G. Comper	Kingston	do	do	
192	Jno. P. McKinlay	Ridgetown	do 4.	8 00	Wm. Kerstead	Lobo	do	do	
193	Geo. Thomson	Brussels	do 4.	2 89	Fleischmann & Co.	Toronto	do	do	
194	M. E. Doyle	North Bay	do 5.	10 00	Miss Katie Doyle	Prescott	do	do	
195	Dr. Jolley	Port Dover	do 6.	1 00	Coatsworth, Hodgins & Co.	Toronto	do	do	1
196	J. F. Lynch	Fournier	do 6.	2 00	Crathern & Caverhill.	Montreal	do	do	
197	J. R. Rousel	Montreal	do 6.	6 00	Mrs. J. R. Rousel	Quebec	do	do	
198	E. Viau	Farnham	do 7.	3 00	A. J. Boucher	Montreal	do	do	
199	M. M. Staebler	Hanover Station	do 7.	1 00	Simpson Publishing Co.	Toronto	do	do	
200	Mrs. H. Clappison	Hamilton	do 8.	1 00	Henry Clappison	Stratford	do	do	
201	Bank of Toronto	Gananoque	do 8.	20 00	A. J. Love	Lyndhurst	do	do	
202	Alf. Jackson	Campbellford	do 8.	8 00	W. Bushell	Toronto	do	Possibly stolen by a dishonest Clerk at Toronto. See Case No. 406, Class II.	4
203	J. B. Taylor	Walland	do 7.	3 57	Fleischmann & Co.	do	do	Possibly stolen by a dishonest Clerk in the Welland Post Office. See Case No. 445, Class II.	4
204	G. S. Wilgress	Huntsville	do 9.	1 00	Protective Coll. Agency	Toronto	do	No trace, owing to want of registration.	1
205	J. F. Walker	Montreal	do 9.	2 00	Miss Thomson	Parkdale	do	do	
206	R. S. Peniston	Toronto	do 9.	5 00	Geo. Carlake	Montreal	do	do	
207	A. W. Disher	Samia	do 10.	3 00	Mrs. A. W. Disher	Toronto	do	Possibly stolen by a dishonest Letter Carrier at Toronto. See Case No. 406, Class II.	4





II.—UNREGISTERED LETTERS.—Report of all cases occurring within the Year ended 30th June, 1891, of abstraction from, or loss of, Letters containing Money, sent through the Post Office in Canada—*Continued.*

No.	Name of Writer.	Where Mailed.	When Mailed.	Alleged Contents.	ADDRESS OF LETTER.		Evidence of Loss or Abstraction.	Result of Proceedings instituted in each case by the Department.	Class in Recapitulation.
					Name.	Place.			
			1890.	\$ cts.					
236	F. Garnett.	Montreal	Oct. 27	5 00	Miss M. Shephard.	Toronto	Stated not to have been received by the person addressed.	No trace, owing to want of registration.	1
237	P. W. Richards.	Quinn	do	2 70	D. M. Ferry & Co.	Windsor	do	do	1
238	Geo. McLeod	North River Bridge, N.S.	do	2 25	Weekly "Empire"	Toronto	do	do	1
239	Enos Marr.	Forks Road	do	13 76	McColl Bros. & Co	do	do	Possibly stolen by a dishonest Letter Carrier at Toronto. See Case No. 406, Class II.	4
240	Mr. Farley	St. Thomas	do	5 00	Mrs. Farley	Kingston	do	No trace, owing to want of registration.	1
241	John Stibbs	Bradford	do	0 40	Fleischmann & Co.	Toronto	do	Possibly stolen by a dishonest Letter Carrier at Toronto. See Case No. 406, Class II.	4
242	Mrs. Donaldson	Mount Healy	do	20 00	Mrs. Llewellyn	do	do	Possibly stolen by a dishonest Letter Carrier at Toronto. See Case No. 406, Class II.	1
243	Alex. Wilson	Caledonia	do	10 00	W. M. Ramsay	Montreal	do	No trace, owing to want of registration.	4
244	Edward Major	North Bay	do	5 00	Edward Young	Perth	do	do	1
245	Mrs. Geo. Phillips.	Rat Portage	do	2 00	Mrs. Pentreath	Winnipeg	do	do	4
246	John Lindsay	Holbrook	do	20 00	A. C. Stover	Fonthill	do	No trace, owing to want of registration.	1
247	Alex'r Leith	Dorchester St'n	Nov. 1	8 00	W. & G. Grey	Toronto	do	Possibly stolen by a dishonest Clerk at the Welland Post Office. See Case No. 445, Class II.	4
248	Jas. Twitchell	Clinton	do	3 00	W. J. Shannon	Seaforth	do	do	1
249	Hutchison, Dig- num & Nisbet.	Toronto	do	50 00	A. G. McIntosh	St. John, N.B.	do	do	1
250	A. Stevenson	Cayuga	do	3 00	Mrs. Kirkpatrick	Chippawa	do	do	1
251	Geo. Edwards	Omenee	do	6 00	Wm. Radam Mi- crobe-Killer Co.	Toronto	do	do	1
252	W. F. Latimer	Gananoque St'n	do	5 00	W. K. Latimer	Kingston	do	do	1
253	D. McSorley	Port Dalhousie	do	4 00	Mrs. D. McSorley	do	do	do	1
254	W. White	Winnipeg	do	2 00	R. B. Gordon	Regina	do	do	1
255	Smith Bros.	Churchville St'n	do	12 00	T. B. Willans	Guelph	do	do	1
256	P. G. Savage	Richmond Hill	do	7 60	Watts & Co.	Brantford	do	do	1



II. UNREGISTERED LETTERS.—Report of all cases occurring within the Year ended 30th June, 1891, of abstraction from, or loss of, Letters containing Money, sent through the Post Office in Canada—*Continued.*

No.	Name of Writer.	Where Mailed.	When Mailed.	Alleged Contents.	ADDRESS OF LETTER.		Evidence of Loss or Abstraction.	Result of Proceedings instituted in each case by the Department.	Class in Reconciliation.
					Name.	Place.			
			1890.	¢s.					
288	Francis Moisan...	St. Sauveur...	Nov. 17..	23 00	Jean Belanger....	Isle Verte.....	Stated not to have been received by the person addressed.	No trace, owing to want of registration.	1
289	.....	Indiantown, N.B.	do 17..	2 00	Roger Flanagan....	Chatham, N.B....	do	Believed to have been stolen from the Chatham Post Office by a youth named Patrick Anderson. Evidence insufficient to warrant prosecution. Contents recovered from the lad's mother.	8
290	A. R. Shewan.....	Toronto, .....	do 18..	1 75	W. H. Wadsworth.....	Montreal.....	do	No trace, owing to want of registration.	1
291	G. H. Hutchinson.	Waterloo, .....	do 19..	1 55	W. C. L. Gill.....	London.....	do	do	1
292	A. D. Young.....	Seaford Station.	do 24..	30 00	H. Ellis.....	Toronto.....	do	do	7
293	Mrs. E. Meek, .....	Yorkville, .....	do 24..	1 00	Miss M. McBride.....	London.....	Stated to have been received without contents.	No evidence to account for the alleged discrepancy.	7
294	Jas. R. Kidd.....	Amherst.....	do 24..	6 00	Mrs. J. R. Kidd....	O'Neills, N.B....	Stated not to have been received by the person addressed.	No trace, owing to want of registration.	1
295	G. F. Thonger .....	Waskada, .....	do 25..	5 00	Mrs. G. F. Thonger	Toronto.....	Stated to have been received without contents.	No evidence to account for the alleged discrepancy.	7
296	Lily Brewster.....	Hespeler.....	do 27..	0 40	L. C. Peake .....	Toronto.....	Stated not to have been received by the person addressed.	No trace owing to want of registration.	1
297	Maggie Wright....	Ullswater, .....	do 29..	5 00	Mrs. Thos. Wright	Ufford.....	do	do	4
298	Class. Lomas, sen.	Montreal, .....	do 29..	40 00	Chas. Lionais, jun.	East Templeton..	do	do	
299	Wm. August.....	Hornings Mills..	do 29..	1 00	Alice August.....	Toronto.....	do	Possibly stolen by a dishonest Letter Carrier at Toronto. See Case No. 406, Class II.	
300	Wm. Nicholson....	Dunville... ..	Dec. 1..	6 50	R. Truax.....	Walkerton .....	do	No trace, owing to want of registration.	1
301	Wm. Gervard .....	International Bridge.	do 1..	2 00	Helen Gervard....	St. Catharines..	do	do	1



302	M. A. Macdonald.	Sydney.	do	1.	1 00	Martin Battle	Ottawa.	do	do	do	4
303	Rev. R. C. Burton.	Elmwood.	do	2.	2 00	Jas. Miller	Greenbank.	do	do	do	
304	F. W. Stall.	Guelph.	do	4.	0 50	P. Jamieson.	Toronto	do	Possibly stolen by a dishonest Letter Carrier at Toronto. See Case No. 406, Class II.	do	
305	A. Raymond.	St. Julien.	do	5.	7 50	Mde. A. Raymond	Montreal.	do	No trace, owing to want of registration.	do	1
306	Geo. Cross.	Jasper Station.	do	5.	10 00	Green & Sons.	do	do	do	do	
307	A. Learned.	Cookshire.	do	5.	279 00	Eastern Townships Bank.	Sherbrooke.	do	do	do	
308	Mrs. Colgan.	Effingham.	do	6.	16 00	Robt. Colgan.	Toronto	do	do	do	
309	John A. Booth.	Toronto	do	8.	60 00	Mrs. Jno. B. Booth	Brantford	do	do	do	1
310	Mrs. Burgoyne.	Fenelon Falls.	do	6.	5 00	C. Burgoyne	Belleville.	do	do	do	
311	Mary Turner.	Hanover.	do	8.	7 00	Annie Turner	Toronto	do	Possibly stolen by a dishonest Letter Carrier at Toronto. See Case No. 406, Class II.	do	4
312	.....	Listowel	do	10.	7 37	Duncan Stewart.	Stratford.	do	No trace, owing to want of registration.	do	
313	Rev. Sister Superior of Convent.	St. Cathbert.	do	13.	5 00	Rev. F. Daniel.	Montreal.	do	do	do	
314	Mrs. Harvey.	Ross Peak Station, C.P.R.	do	14.	5 00	E. Galbraith & Co.	Winnipeg.	do	do	do	
315	W. B. Armstrong.	Rosseau.	do	14.	3 50	F. W. Ness.	Montreal.	do	do	do	
316	Angus McKeown.	Victoria, B.C.	do	14.	5 00	Mrs. S. Robinson	Centreville.	do	do	do	
317	C. J. Walker.	St. Thomas.	do	15.	30 00	Mrs. Dr. Massie.	Colborne	do	do	do	
318	Pierre Brassard.	Quebec	do	15.	18 00	Joseph Dugal.	St. Roch.	do	do	do	
319	George Veasy.	Roberval.	do	15.	12 00	Mrs. Woods.	St. Ferdinand.	do	do	do	
320	Vernette & Goulet	Robertson Station	do	16.	20 00	J. W. Brayley.	Montreal.	do	do	do	
321	W. F. Davidson	Toronto	do	16.	1 00	A. A. Audet.	do	do	do	do	
322	Miss M. Anders.	Waterloo	do	16.	2 50	L. C. Peake	Toronto	do	do	do	
323	E. H. Smith	Belwood	do	16.	2 00	Rev. W. Briggs	do	do	do	do	
324	F. Blanchfield	Toronto	do	17.	10 00	Thos. Blanchfield.	Minosa	do	do	do	
325	George Cross.	Jasper Station.	do	17.	10 00	Green & Sons	Montreal.	do	do	do	
326	Atwater & Mackie	Montreal.	do	18.	2 00	N. S. Garland.	Ottawa	do	do	do	
327	Miss Harper.	do	do	18.	25 00	Miss McCallum.	Quebec	do	do	do	
328	Mrs. Sadlier.	Lucan	do	18.	5 00	Miss H. Furby.	Toronto	do	Possibly stolen by a dishonest Letter Carrier at Toronto. See Case No. 406, Class II.	do	4
329	Miss W. Doherty.	Napanee.	do	19.	14 00	R. S. Wilde.	do	do	No trace, owing to want of registration.	do	
330	Thos. Fortin	St. Paul's Bay.	do	19.	21 00	Joseph Vandry	Quebec.	do	do	do	
331	Jas. Owens.	Victoria, B.C.	do	19.	6 00	Anna Owens	Toronto	do	do	do	1
332	Miss Alice Murphy	Cayuga	do	22.	5 00	Geo. P. Murphy	Montreal.	do	do	do	
333	A. K. Farquhar.	Schreiber Station, C.P.R.	do	22.	5 00	R. A. Farquhar	do	do	do	do	
334	Mrs. McCarthy.	London.	do	23.	5 00	Sister Eucleria	Toronto	do	Possibly stolen by a dishonest Letter Carrier at Toronto. See Case No. 406, Class II.	do	4
335	Miss Mary Carey.	Hamilton.	do	23.	2 00	Miss McPherson.	do	do	do	do	

II. UNREGISTERED LETTERS.—Report of all cases occurring within the Year ended 30th June, 1890, of abstraction from, or loss of, Letters containing Money, sent through the Post Office in Canada—*Continued.*

No.	Name of Writer.	Where Mailed.	When Mailed.	Alleged Contents.	ADDRESS OF LETTER.		Evidence of Loss or Abstraction.	Result of Proceedings instituted in each case by the Department.	Class in Recapitulation.
					Name	Place.			
336	W. D. Masson	Strathallan	Dec. 23.	6 00	Harry Rines	Fonthill	Stated not to have been received by the person addressed.	Possibly stolen by a dishonest Clerk at the Welland Post Office. See Case No. 445, Class II.	4
337		Kelly's Crossing.	do 24.	2 00	Martin Monaghan.	Montreal	do	No trace, owing to want of registration.	
338	Arthur Bradley	Gananoque.	do 27.	5 00	Mrs. Joseph King.	Kingston	do	do	
339	A. W. Brodie	Hespeler.	do 29.	10 00	Mrs. A. W. Brodie	Peterboro	do	do	
340	Mrs. Gouldson	Montreal	do 30.	2 00	Edward Onslow	Quebec	do	do	
341	C. R. Commander.	London.	do 30.	1 00	"Globe" Printing Company.	Toronto	do	do	
342	Kate Teale	Victoria, B.C.	do 30.	5 00	J. W. Kneeshaw.	Montreal.	do	do	
343	Rev. T. Macpherson	Stratford	do 31.	2 00	"Presbyterian Review."	Toronto	do	do	
344	Mrs. S. E. Allen.	London.	do 31.	5 00	Louis C. Peake	do	do	do	
345	Mrs. S. R. Foster.	Montreal	do 31.	5 00	Mrs. M. C. Coy.	St. John, N.B.	do	do	
346	Thomas Jobb.	Cookstown.	do 31.	2 50	Publishers "Beaton World."	Beaton.	do	do	
347	S. Cloutier	St. Octave	1891. Jan. 2.	14 00	Turner, St. Pierre & Co.	Montreal.	do	do	
348	Jno. Patterson.	Denfield	do 2.	17 00	Bank of Commerce	Parkhill.	do	do	
349	A. B. Owen.	Toronto	do 3.	10 00	C. Botwright.	St. Thomas.	do	do	
350	W. Acheson	Milvorton	do 6.	50 00	Boymann, Kennedy & Co.	London.	do	do	
351	John Herd	Victoria, B.C.	do 6.	10 00	Miss Minnie Herd	Stratford.	do	do	
352	John Ballard	Montreal.	do 6.	2 00	B. G. Ballard.	Toronto	do	Possibly stolen by a dishonest Letter Carrier at Toronto. See Case No. 406, Class II.	4
353	Mrs. E. Storey	Milton.	do 9.	16 00	A. Gemmell	do	do	do	
354	Wm. Arthur	Kingston.	do 9.	4 00	Mrs. Wm. Arthur.	do	do	do	
355	John Herd	Victoria, B.C.	do 9.	20 00	Miss Minnie Herd.	Stratford.	do	No trace, owing to want of registration.	
356	H. C. Aylwin.	Toronto	do 10.	8 00	Mrs. Aylwin	Port Elgin.	do	do	
357	McClary Mfg. Co.	Montreal.	do 12.	2 50	B. T. Smith	Coaticook.	do	do	
358	G. A. Perry	River Beaudette	do 12.	10 00	E. Chown & Son.	Kingston.	do	do	
359	J. A. Upper.	Victoria, B.C.	do 12.	20 00	Enclave Upper.	Albanburg	do	do	
360	George Hunter.	Winnipeg.	do 12.	5 00	Mrs. G. Hunter.	Campbellford	do	do	

361	Parmer Merritt...	Smithville	do	13.	6 00	Peter Lane.....	Fonthill.....	do	Possibly stolen by a dishonest assistant in the Welland Post Office. See Case No. 443, Class II.	4
362	Canon Davis.....	London	do	14.	16 25	W. H. Merry .....	Stratford.....	do	No trace, owing to want of registration.	
363	James Drake.....	Selkirk.....	do	16.	7 00	Mrs. Jas. Drake.....	Winnipeg.....	do	do	
364	John Duncan.....	Montreal.....	do	19.	0 75	Wm. Pardon.....	McDonald's Corner.	do	do	
365	Lumina Rouleau .....	St. Ubalde.....	do	20.	15 00	Dne. Veuve F. St. Roch.....	St. Roch.....	do	do	
366	C. Oris.....	Seagrave.....	do	20.	11 00	Mrs. A. Beatty.....	Udney .....	do	do	
367	Wm. Burke.....	Ottawa.....	do	21.	10 00	Minnie Burke.....	Sinc.....	do	do	
368	T. J. Shanks.....	Belleville.....	do	21.	3 00	Mrs. Shanks.....	Kingston.....	do	do	
369	O. Robillard .....	St. Dominique des Cédres.	do	21.	5 00	Paul Robillard.....	Montreal.....	do	do	
370	Minnie Forber .....	Lindsay .....	do	22.	2 10	C. F. Forber .....	Toronto .....	do	do	
371	Thos. Austin .....	Woodstock .....	do	23.	5 00	W. Rusen .....	London .....	do	do	
372	Rev. E. D. Holden .....	Hamilton .....	do	25.	5 00	Mrs. Jno. Richards .....	Montreal.....	do	do	
373	H. K. Parsons.....	Guelph .....	do	26.	5 00	H. M. Giles .....	do .....	do	do	
374	Thos. O'Brien.....	Newmarket.....	do	26.	2 00	Mrs. Thos. O'Brien.....	Stayner.....	do	do	
375	Mrs. McKee.....	Toronto .....	do	26.	3 00	John Hill.....	Peterboro' .....	do	do	
376	John Lippert.....	Khiva .....	do	27.	18 00	H. L. Lippert .....	Petersburg.....	do	do	
377	A. Hall.....	London.....	do	30.	5 00	Jas. Crouch.....	Toronto .....	do	do	
378	W. B. Blackhall .....	Montreal.....	do	31.	10 00	Mrs. W. B. Blackhall.....	do .....	do	do	
379	Bigaquette et frère .....	do .....	do	31.	0 41	H. B. Rosseau .....	Quebec .....	do	do	
380	F. Shackelton.....	Victoria, B.C.....	Feb. 1.	1.	6 00	F. Shackelton.....	Hamilton .....	do	do	
381	Sœur St. Raphael.....	Roberval.....	do	1.	4 00	Mrs. P. J. O'Sullivan.....	St. Roch.....	do	do	
382	P. Bureau.....	Three Rivers.....	do	1.	3 00	Gervais & Hadon.....	do .....	do	do	
383	Rev. A. Bouvier .....	St. Joseph de Sorel.....	do	2.	4 00	J. P. Tardivel.....	do .....	do	do	
384	H. L. Maltby .....	Montreal.....	do	2.	2 25	W. P. Kenny.....	Aylmer.....	do	do	
385	Sœur St. Raphael.....	Roberval.....	do	2.	1 00	Miss Kate Hawkins .....	St. Roch.....	do	do	
386	H. Westbrook.....	Stratford Railway Station.	do	2.	5 00	G. Utting .....	Woodstock.....	do	do	
387	W. J. Wilson.....	Greenway .....	do	3.	15 00	A. M. Wilson.....	Greenbush .....	do	do	
388	John Beattie.....	Goderich .....	do	3.	3 00	Mrs. Thos. Widders .....	Lindsay .....	do	do	
389	Miss L. Scrivans .....	North Bay .....	do	4.	10 00	Miss E. Scrivans.....	Ottawa.....	do	do	
390	John Herd.....	Victoria, B.C.....	do	4.	5 00	Miss Minnie Herd.....	Stratford.....	do	do	
391	W. R. Clayton .....	Ingersoll.....	do	5.	10 00	Mrs. W. R. Clayton.....	Listowel .....	do	do	
392	Rev. H. J. Miller.....	Coe Hill Mines.....	do	5.	0 50	"Witness" .....	Montreal.....	do	do	
393	J. H. Wismer.....	Port Elgin.....	do	6.	2 00	W. W. Vanston.....	Poole's Resort .....	do	do	
394	Jessie Gamble .....	Kingston.....	do	6.	10 00	Katie Hayward.....	Toronto .....	do	do	
395	Jessie Gamble .....	Montreal.....	do	7.	4 00	Mrs. R. Gamble .....	St. Roch de Québec.....	do	do	
396	John Fohsbee.....	Strathroy.....	do	7.	8 00	Miss K. Allen .....	do.....	do	do	
397	Jean Pageau.....	Windson.....	do	7.	2 00	J. E. Pageau .....	Toronto .....	do	do	



II.—UNREGISTERED LETTERS.—Report of all cases occurring within the Year ended 30th June, 1891, of abstraction from, or loss of, Letters containing Money, sent through the Post Office in Canada—*Continued.*

No.	Name of Writer.	Where Mailed.	When Mailed.	Alleged Contents.	ADDRESS OF LETTER.		Evidence of Loss or Abstraction.	Result of Proceedings instituted in each case by the Department.	Class in Recapitulation.
					Name.	Place.			
398	H. Hilyard.	St. John, N.B.	1891. Feb. 8.	5 00	G. A. Hilyard.	Lennoxville	Stated not to have been received by the person addressed.	No trace, owing to want of registration.	1
399	Mrs. Raymur	Victoria, B.C.	do 9.	5 00	Miss Bessie Lawson	Halifax, N.S.	do	do	1
400	M. Brazeau.	Montreal.	do 10.	5 00	S. Brazeau.	Chute-a-Blondeau	do	do	1
401	A. McClay.	Woodstock	do 10.	10 00	W. S. McClay.	Toronto	do	do	1
402	H. W. Lockwood	Westport	do 10.	2 00	"Christian Guardian."	do	do	do	1
403	Mrs. Anderson.	Iroquois.	do 10.	10 00	W. J. Anderson.	Kingston.	do	do	1
404	Ella Martin.	Rapid City	do 10.	4 00	Arthur Martin.	Winnipeg.	do	do	1
405	W. Walker.	Brandon	do 10.	10 00	Mrs. J. F. Kinley.	Campbellford.	do	do	1
406		Sebringville	do 10.	4 00	Jos. Mutchmore.	Toronto	do	do	1
407	Mrs. S. J. Gardiner.	Warton	do 12.	5 00	S. J. Gardiner.	do	do	Stolen by a Letter Carrier on the staff of the Toronto Post Office, named Robert Jamieson, who was tried for the offence and sentenced to six years in penitentiary. A portion (\$2) of the money contained in this letter was found on the prisoner's person when arrested.	3
408	M. Shaver	Cardinal Ry. Stn	do 12.	5 75	Jno. Dougall & Son	Montreal.	do	No trace, owing to want of registration.	1
409	S. Ruggles	Tiverton, N.S.	do 16.	1 00	S. E. Lefebvre	do	do	do	1
410	Mrs. O. Richardson	London.	do 18.	1 00	W. H. Esery.	Toronto.	do	do	1
411	David Guenther	Victoria, B.C.	do 18.	6 00	Mrs. D. Guenther.	Heseler.	do	do	1
412	T. W. Lanaroux	Whitevale	do 19.	6 00	Asa Booth	Toronto	do	do	1
413	Mrs. M. Dougall	Cornfield, B.C.	do 19.	6 00	H. Rogers.	Victoria, B.C.	do	do	1
414	A. Deforge.	Kingston.	do 22.	5 00	Miss C. Deforge.	Coteau Station.	do	do	1
415	Mrs. McLay	Woodstock	do 23.	2 00	W. S. McLay.	Toronto	do	do	1
416	J. A. Roberge.	Ridout Station.	do 24.	5 10	Cadieux & Derome	Montreal.	do	do	1
417	J. L. Hughes	Peterboro	do 25.	7 00	Mrs. R. W. Sharpe	London.	do	do	1
418	J. O. Blanchard.	St. Hyacinthe.	do 26.	1 00	S. E. Lefebvre.	Montreal.	do	do	1
419	Rev. Geo. Côté	St. Croix	do 26.	1 00	Henri Boisvert.	Quebec	do	do	1

420	J. B. Luther .....	Hall's Stream.....	do	27..	1 00	S. E. Lefebvre.....	Montreal.....	do	do	do
421	E. G. Chamberlain	Parkhill .....	do	27..	10 00	Miss Chamberlain,	Chatham .....	do	do	do
422	Thos. Holt .....	Quebec .....	do	28..	1 00	F. W. Holt .....	Toronto .....	Stated to have been received without contents.	No evidence to account for alleged discrepancy. Cover of letter not preserved.	Cover of register, owing to want of registration.
423	Wm. Burgman .....	Milverton Stat'n ..	do	28..	17 00	London Boot and Shoe Co.	London .....	Stated not to have been received by the person addressed.	No trace, owing to want of registration.	do
423	Anthony Tryon .....	Ottawa .....	Mar.	1..	3 00	Mrs. R. Tryon .....	Kingston.....	do	do	do
423	M. Crotty .....	Hamilton .....	do	2..	10 00	E. A. Crotty .....	Toronto .....	do	do	do
426	E. B. Knight .....	Woodford .....	do	2..	46 00	J. F. Kirk .....	do	do	do	do
427	M. Kee .....	Ornstown .....	do	2..	1 00	Jno. Dougall & Son	Montreal.....	do	do	do
428	J. R. Wright.....	Peterboro' .....	do	3..	5 00	Mrs. J. R. Wright	do	do	do	do
429	Wm. Teeter .....	Belfountain .....	do	3..	8 40	Robt. King .....	Marshville.....	do	do	do
430	E. G. Chamberlin.	Park Hill .....	do	5..	2 00	"Journal of Com- merce,"	Montreal.....	do	do	do
431	A. Paquet .....	Ste. Thérèse .....	do	6..	8 32	Poirier & Besette.	do	do	do	do
432	E. A. Maningham.	Ste. Julie de Somerset.	do	6..	8 20	Chas. Stark & Co.,	Toronto .....	do	do	do
433	Auguste Hébert.	St. Paschal .....	do	7..	11 50	Théophile Beland..	Quebec.....	do	do	do
434	T. S. C. Lee .....	Calgary .....	do	7..	2 00	Lt.-Gov. Royal.....	Regina.....	do	do	do
435	Frank Pelton.....	Victoria, B.C.....	do	9..	7 00	L. Leigh .....	Victoria, B.C.	do	do	do
436	Miss Gilmore.....	Goldstream, B.C.	do	10..	0 30	W. H. Billing .....	Toronto .....	do	do	do
437	F. C. Austin .....	Portland, Ont.....	do	10..	15 00	E. Chown & Son ..	Kingston.....	do	do	do
438	R. J. Donelly .....	Murilla .....	do	10..	10 00	M. Donelly .....	do	do	do	do
439	Mrs. Kirk .....	Montreal .....	do	11..	5 00	Miss Kirk .....	do	do	do	do
440	Elizabeth Daggett.	Elmwood Rail-way Station.	do	12..	12 00	Teresa Daggett.....	Toronto .....	do	do	do
441	John Langdon .....	St. Patrick .....	do	13..	10 00	James Turner.....	Hamilton.....	do	do	do
442	Lucy Hurd.....	Kingston.....	do	16..	3 00	Mrs. A. Hurd .....	Oxford Mills ..	do	do	do
443	Mrs. McDougall.	Calabogie .....	do	17..	6 00	W. H. Kennedy ..	Brockville ..	do	do	do
444	H. H. Gougle .....	Beulah .....	do	17..	0 25	Miss Vaux .....	Winnipeg.....	do	do	do
445	Welland Railway	Welland Railway	do	19..	4 00	Nellie Simpson.....	Fonthill .....	do	do	do
446	T. Warren .....	St. Catharines....	do	20..	3 75	W. J. Wollard .....	Kingston.....	do	No trace, owing to want of registration.	do
447	Francis Gorins .....	Bluevale .....	do	20..	1 00	"Advertiser" Printing Co.	London .....	do	do	do
448	Maggie Anderson.	Brewer's Mills....	do	21..	1 00	"Grip" Publishing Co.	Toronto .....	do	do	do
449	GEO. WHITELEY .....	Allandale .....	do	23..	1 00	Mrs. Whiteley ..	do	do	do	do
450	Hudson Bay Co.....	Winnipeg .....	do	23..	2 00	R. B. Gordon .....	Regina.....	do	do	do
451	Mrs. E. McIntyre.	Annersburg .....	do	24..	0 60	W. H. Billing .....	Toronto .....	do	do	do
452	Mrs. McGregor .....	Forest.....	do	25..	2 00	Mrs. W. C. Ash-down.	do	do	do	do

II. UNREGISTERED LETTERS.—Report of all cases occurring within the Year ended 30th June, 1891, of abstraction from, or loss of, Letters containing Money, sent through the Post Office in Canada—*Continued.*

No.	Name of Writer.	Where Mailed.	When Mailed.	Alleged Contents.	ADDRESS OF LETTER.		Evidence of Loss or Abstraction.	Results of Proceedings instituted in each case by the Department.	Class in Reapitulation.
					Name.	Place.			
453	John Spence.	Morris.	1891. Mar. 26.	% 7 30	J. W. Horne.	Winnipeg.	Stated not to have been received by the person addressed.	No trace, owing to want of registration.	1
454	Wm. Lewis.	Collingswood	do 27.	20 00	Nellie Cunningham	Toronto	do	do	
455	Wm. Glenfield	Toronto	do 27.	8 00	Mrs. W. Glenfield.	Oxenden.	do	do	
456	Joseph Fournier	Montuagny	do 27.	50 00	L. a. Compagnie	Quebec.	do	do	
457	Tourville & Co	Montreal.	do 28.	25 00	Chinick.		do	do	
458	Rev. M. Babin	Caraquet, N. B.	do 30.	2 00	Capt. P. Lacroix.	Sorel.	do	do	
459	Mrs. C. Bois.	St. Aubert.	do 30.	5 00	F. D. Babin.	Montreal.	do	do	
460	M. L. Poole	Ingersoll.	do 31.	1 00	Mrs. E. Bedard.	Quebec.	do	do	
461	D. Pepsault	Montreal.	do	4 50	Mrs. M. L. Poole.	London.	do	do	
462	Wm. Chapman.	Victoria, B.C.	April 1.	50 00	M. le Curé.	Lavaltrie.	do	do	
463	R. S. C. Mowat.	Elkhorn, Man.	do 1.	2 00	Mrs. W. Chapman.	Cornwall.	do	do	
464	T. H. Gilmore	Winnipeg.	do 3.	5 00	Mrs. C. J. Mitchell.	Kingston.	do	do	
465	John O'Shea.	Frankford.	do 3.	30 00	Land Titles Office.	Portage la Prairie.	do	do	
466	Octave Brochu.	St. Gervais.	do 3.	8 00	W. C. Martin.	Kingston.	do	do	
467	C. S. Riddell.	Brookville.	do 3.	10 00	Jos. Anyot & frere.	Quebec.	do	do	
468	G. H. Labbe.	Montreal.	do 4.	50 00	L. S. Gurley.	Colbourg.	do	do	
469	Margaret Vanstone	Kincardine.	do 5.	5 00	D. R. Nelson.	North Bay.	do	do	
470	Ellen Clancey.	Toronto	do 5.	2 00	Mrs. J. W. Millard.	Hamilton.	do	do	
471	J. B. Richard.	Montreal.	do 5.	4 00	Mrs. H. Thomas.	Cedar Dale.	do	do	
472	Mrs. Singer.	do	do 6.	0 25	Louis Martel.	St. Roch de Quebec.	do	do	
473	Mrs. R. Conlan.	Guelph.	do 7.	3 00	Miss M. L. Singer.	Rigaud.	do	do	
474	L. Stillman.	Campbellford.	do 7.	1 00	Thos. Conlan.	Toronto.	do	do	
475	Geo. Stevenson.	Lanark.	do 8.	8 13	"Advertiser" Printing Co.	London.	do	do	
476	Mrs. G. S. Cowan.	Gananoque.	do 9.	4 00	Wm. Coates & Bro.	Brookville.	do	do	
477	Jane A. Hewton.	Faraday.	do 10.	3 00	Miss A. H. Cowan.	Kingston.	do	do	
478	Jane W. Bain	Whitby.	do 10.	3 00	Charles Bostford.	Toronto.	do	do	
479	Mrs. L. N. Ross.	Napanee.	do 11.	6 00	Thos. R. Bain.	do	do	do	
480	J. W. Bertram.	Harrowsmith Railway Station.	do 11.	25 00	D. D. Pryn.	Kingston.	do	do	
					A. Chown & Co.	do	do	do	





II. UNREGISTERED LETTERS.—Report of all cases occurring within the Year ended 30th June, 1891, of abstraction from, or loss of, Letters containing Money, sent through the Post Office in Canada—*Continued.*

No.	Name of Writer.	Where Mailed.	When Mailed.	Alleged Contents.	ADDRESS OF LETTER.		Evidence of Loss or Abstraction.	Result of Proceedings instituted in each case by the Department.	Class in Recapitulation.
					Name.	Place.			
			1891.	\$ cts.					
518	W. A. Anderson.	International Bridge.	May 12..	1 00	W. Britt.....	Toronto.....	Stated not to have been received by the person addressed.	No trace, owing to want of registration.	1
519	A. Piché .....	Bord à Plouffe..	do 13..	3 00	Moïse Desjean ..	St. Henri de Montreal.	do	do	
520	Mrs. C. Bois .....	St. Aubert.....	do 13..	5 00	Mrs. Elzéar Dechenne.	Quebec.....	do	do	
521	Miss Papst.. ..	Coleman.....	do 15..	10 00	S. W. Papst.....	Mitchell..	do	do	1
522	R. A. Furness ..	London.....	do 16..	1 00	D. English & Co...	Montreal..	do	do	
523	Rev. E. O. Plante.	St. Fortunat...	do 16..	10 00	Capt. René Plante.	Ste. Petronelle d'Orleans.	do	do	
524	A. E. Besette ..	Montreal.....	do 20..	2 00	Arthur Vien.....	Acton Vale....	do	do	3
525	Mrs. H. Stoddart.	Beaverton.....	do 22..	5 00	Anne Stoddart...	Acton.....	do	do	
526	H. Scheyer.....	Toronto (street letter box).	do 22..	15 00	H. Scheyer. ....	Montreal.....	do	do	
527	Miss Deane. ....	Lindsay.....	do 22..	7 00	Miss T. Deane....	Park Hill.....	do	Believed to have been stolen by a dishonest assistant in the Park Hill Post Office who fled the country before his arrest could be effected. Contents made good by the Postmaster of Park Hill.	3
528	Jennie G. McKenzie.	Point Edward...	do 23..	1 00	Mrs. Arthur Johnston.	Guelph.....	do	No trace, owing to want of registration.	
529	Rose Wyatt.....	London.....	do 25..	3 00	J. Wyatt.....	Peterboro'....	do	do	
530	C. T. de Preston..	Quebec.....	do 26..	2 00	A. Dupuis.....	Village des Aulnaies.	do	do	1
531	A. Dumontier.....	Point St. Charles	do 28..	2 00	Miss G. Dumontier	Hull.....	do	do	
532	G. W. Wright.....	Paraday.....	do 30..	1 40	C. G. Wilson.....	Madoc.....	Stated to have been received without contents.	This abstraction was committed by a youth named R. K. Waddington, an assistant in the Coe Hill Mines Post Office, who was brought to trial, convicted, and sentenced to penitentiary. Contents made good by the Postmaster of Coe Hill Mines.	

533	Rev. L. Dnnglade.	LaPetite Rivière St. François.	.....	7 50	Archange Racine.	Quebec.	Stated not to have been received by the person addressed.	No trace, owing to want of registration.	1
534	A. Dumontier.	Point St. Charles	June 1.	3 00	Miss G. Dumontier	Hull.	do	do	
535	Rev. C. Quinney.	Oak Lake.	do 2.	2 50	"Free Press"	Winnipeg	do	do	
536	George Reedy.	Barrie.	do 4.	2 00	Mrs. J. Joliffe.	Toronto	do	do	
537	Notman & Sons.	Montreal.	do 2.	2 00	J. Bruce.	do	do	do	
538	Jane Cumming.	Colborne.	do 6.	10 00	Mrs. Craick.	Port Hope.	do	do	
539	R. H. Payne.	Nanaimo.	do 6.	15 00	Edmund Payne.	Vancouver.	do	do	
540	Thos. More.	Roger's Pass Station, B.C.	do 7.	1 00	M. V. Lubon.	Toronto.	Stated to have been received without contents.	No evidence to account for the alleged discrepancy.	7
541	W. B. Sheppard.	Qu'Appelle Station.	do 9.	2 00	Lieut. Governor.	Regina.	Stated not to have been received by the person addressed.	No trace, owing to want of registration.	
542	R. J. E. Scott.	Perth.	do 15.	4 00	R. J. E. Scott.	Port Hope	do	do	
543	Joseph Pelletier.	Montreal.	do 15.	3 00	Mrs. Joseph Pelletier.	St. Roch de Québec.	do	do	
544	J. A. Cole.	Wardsville.	do 18.	2 48	Jas. Popham & Co.	Montreal.	do	do	
545	Wm. Waldie.	Victoria Harbour Ry. Station.	do 18.	3 00	F. N. Waldie.	Toronto	do	do	
546	Geo. Nadeau.	Montreal.	do 19.	2 00	F. X. Nadeau.	St. Roch de Québec.	do	do	1
547	S. S. Potter.	Belleville.	do 20.	2 25	John H. Dunlop.	Toronto	do	do	
548	A. Boucher.	Montreal.	do 21.	2 00	Alphonse Gironx.	St. Roch de Québec.	do	do	
549	Joseph Jacob.	do	do 26.	4 00	Mrs. Jos. Jacob.	Angé Gardien.	do	do	
550	Mrs. J. Grant.	Kingston.	do 27.	1 00	Miss Grant.	St. Catharines.	do	do	
551	Mrs. Martha Lett.	Eganville.	do 27.	11 00	Norman Bryce.	Forester's Falls.	do	do	
552	Mde. Lavote.	Montreal.	do 29.	3 00	F. L. Heureux.	St. Roch de Québec.	do	do	

## RECAPITULATION.

Classification of Cases.		Regis-tered.	Unregis-tered.
1. Letters stated not to have been received by persons addressed; but, for want of registration, no trace obtainable, and no positive evidence that loss occurred in the Post Office.		3	487
2. Letters contained in mails or mail packages stated not to have reached offices for which they were intended; cause of failure not discoverable.		42	5
3. Letters lost, embzzled or misdelivered in the Post Office, the contents of which (or a portion thereof) were recovered from the officers responsible, or otherwise made good.		27	46
4. Letters lost, embzzled or misdelivered in the Post Office, the contents of which were not recovered.		5	3
5. Letters, the contents of which (or a portion thereof) were lost or stolen, and made good by or on behalf of the officers responsible.		33	8
6. Letters, the contents of which (or a portion thereof) were lost or stolen in the Post Office, and not recovered.		23	3
7. Letters stolen, or supposed to have been stolen, from the Post Office or mails <i>en route</i> , the contents of which (or a portion thereof) were recovered or made good.		14	
8. Letters stolen from the Post Office or mails <i>en route</i> , the contents of which were not recovered.		4	
9. Letters accidentally destroyed during course of Post.		2	
10. Still under investigation.			
11. Still under investigation.			
Totals.		155	552

W. D. LE SUEUR, Secretary.

WM. WHITE, Deputy Postmaster-General.



STATEMENT of Letters received at the Dead Letter Branch, Canada, during the  
showing how such Dead

TABLE No. 1.—Showing the Number of Letters of all

Number received.	—	—	—	—
<b>DEAD LETTERS:—</b>				
On hand 30th June, 1890; (of these were registered. 33)	1,026			
Returned from Great Britain ( do 339)	10,133			
do United States ( do 1,273)	99,383			
do Newfoundland ( do 1)	585			
do Victoria ( do 5)	173			
do Barbados ( do —)	146			
do New South Wales ( do 4)	119			
do Mexico ( do 6)	104			
do Other colonies and foreign countries; (of these were registered..... 1)	411			
1,662	112,080			
LESS—Registered, accounted for below.....	1,662			
		110,418		
Returned from Post Offices in Canada, classified as follows:				
Registered Letters on hand on 30th June, 1890.....	809			
do in hands of Postmaster on 30th June, 1890.....	171			
do received during the year ended 30th June, 1891 (including those of foreign origin)....	9,093			
		10,073		
Letters found to contain value, and recorded, on hand 30th June, 1890.....	379			
Letters found to contain value, and recorded, in hands of Postmasters, 30th June, 1890.....	100			
Letters found to contain value, and recorded, received during the year ended 30th June, 1891.....	3,700			
		4,179		
			14,252	
Ordinary Dead Letters originating in Canada:—				
On hand 30th June, 1890.....				
Received during the year ended 30th June, 1891.....	217,756			
		217,756		
Ordinary Dead Letters originating in other countries re- ceived during the year ended 30th June, 1891....		109,809		
Dead Letters with printed addresses of senders.....		37,158		
do official franks.....		11,877		
Returned Dead Letters, <i>i.e.</i> , Letters sent out from Dead Letter Branch and again returned unclaimed.....		61,924		
Dead Books, Parcels, &c. —				
On hand 30th June, 1890.....	363			
Received during the year ended 30th June, 1891. ....	33,073			
		33,436		
			471,960	
			299,498	
Circulars, Postal Cards, &c. ....				896,128
Carried forward.....				896,128

Year ended 30th June, 1891, and of their contents, valuable or otherwise, Letters have been disposed of.

kinds received, with the disposition made of them.

How disposed of.	—	—	—	—
DEAD LETTERS :—				
Returned to Great Britain, including all foreign letters not enumerated below; (of these were registered. .... 514)	19,394			
Returned to United States; (of these were registered 401)	59,632			
do Newfoundland ( do .. 10)	833			
do Mexico ( do .. —)	277			
do Victoria ( do .. 3)	96			
do New South Wales ( do .. 2)	59			
do Japan ( do .. 3)	59			
do New Zealand ( do .. —)	61			
do Bermuda ( do .. —)	53			
do Other colonies and foreign countries; (of these were registered. .... 8)	378			
941				
Letters of British, colonial or foreign origin remaining on hand 30th June, 1891; (of these were registered 78)	88			
Books, Post Cards, &c., of British and foreign origin, also returned. ....		80,930		
		28,879		
Registered Letters returned to writers, including those of foreign origin. ....	7,360			
do in hands of Postmasters. ....	55			
do failed of delivery to writers, owing to refusal to redeem, want of address, &c., found to be of no value and destroyed. ....	1,505			
Registered Letters in Dead Letter Branch awaiting claim. ....	173			
		9,093		
Letters found to contain value returned to writers. ....	3,415			
do do in hands of Postmasters. ....	12			
do do being found upon further examination to be of no value, destroyed. ....	3			
do do in Dead Letter Branch awaiting claim. ....	270			
		3,700		
Registered and Value Letters in hands of Postmasters or in Dead Letter Branch on 30th June, 1890, and since disposed of as follows :—				
Delivered. ....	281			
Destroyed. ....	1,127			
In Dead Letter Branch. ....	51			
		1,459		
Ordinary Dead Letters returned to writers. ....		199,038		
do do with printed addresses returned to senders. ....		37,158		
do do returned to Government Departments. ....		11,877		
do do without signatures or postmarks, accounts, &c., destroyed. ....	129,136			
Returned Dead Letters destroyed. ....	61,924			
		191,060		
Dead Books, Parcels, &c., returned to senders. ....	29,511			
do do of no value disposed of. ....	2,698			
do do remaining in Dead Letter Branch. ....	1,227			
		33,436		
Circulars, Post Cards, &c., destroyed, or otherwise disposed of. ....		299,498		
			772,067	
				896,128
Carried forward. ....				896,128

## STATEMENT of Letters received at the Dead Letter Branch, Canada,

TABLE No. 1.—Showing the Number of Letters of all kinds

Number received.	—	—	—	—
Brought forward.....				896,128
SPECIAL LETTERS, classified as follows :—				
Registered Letters on hand on 30th June, 1890.....	41			
do in hands of Postmasters, 30th June, 1890.....	88			
do received for postage, better address, &c.....	2,027	2,156		
Letters found to contain value and recorded :				
On hand 30th June, 1890.....	57			
In hands of Postmasters on 30th June, 1890.....	16			
Received for postage, better address, &c.....	996	1,069	3,225	
Ordinary Letters on hand on 30th June, 1890.....	331			
do received for postage.....	15,509	15,840		
do received for better address.....		12,530	28,370	
Drop Letters received for postage.....			5,317	
Letters for foreign countries on hand on 30th June, 1890..		257		
do do received as unpaid or short-paid.....		13,236		
Returned Dead Letters received.....			13,493	
Postal Cards received for postage.....		5,772	2,408	
do do address.....		5,037		
Circulars received for postage.....		2,857	10,809	
do do address.....		1,777	4,634	
Parcels, Books, &c. :—				
On hand on 30th June, 1890, received in that and pre- vious years.....		1,586		
Received for postage, better address, or not claimed (of these 1,376 contained enclosures contrary to law). . . . .		7,560	9,146	
Carried forward.....				77,402
				973,530



during the Year ended 30th June, 1891, &c.—*Continued.*

received, with the disposition made of them.—*Continued.*

How disposed of.	—	—	—	—
Brought forward.....				896,128
<b>SPECIAL LETTERS :—</b>				
Registered Letters returned to writers or forwarded to address.....	1,974			
do in hands of Postmasters.....	10			
do unsigned and of no value, destroyed in consequence of the inability of the Department to return or deliver.....	20			
do in Dead Letter Branch awaiting claim.....	23	2,027		
Letters found to contain value, returned to writers or forwarded to address.....	942			
do do in hands of Postmasters.....				
do do in Dead Letter Branch awaiting claim.....	54		996	
Special Registered and Value Letters in hands of Postmasters or in Dead Letter Office on 30th June, 1890, and since disposed of as follows :—				
Delivered.....	168			
In Dead Letter Branch.....	5			
Destroyed.....	29	202		
			3,225	
<b>Ordinary Letters received for postage :—</b>				
Returned to writers.....	7,922			
Forwarded to address.....	6,577			
Destroyed in consequence of the inability of the Department to return or deliver.....	952			
Remaining on hand on 30th June, 1891.....	389			
		15,840		
<b>Ordinary Letters received for better address :—</b>				
Returned to writers.....	9,595			
Forwarded to address.....	649			
Destroyed in consequence of the inability of the Department to return or deliver.....	2,286			
		12,530		
<b>Drop Letters received for postage :—</b>				
Returned to writers.....		4,071		28,370
Forwarded to address.....		462		
Destroyed in consequence of the inability of the Department to return or deliver.....		784		
			5,317	
<b>Letters for foreign countries :—</b>				
Returned to writers.....		4,714		
Forwarded to address.....		8,000		
Destroyed in consequence of the inability of the Department to return or deliver.....		304		
Remaining on hand on 30th June, 1891.....		475		
			13,493	
Returned Dead Letters destroyed.....			2,408	
Postal Cards received for postage, returned to writers or forwarded to address.....	1,657			
Postal Cards destroyed in consequence of the inability of the Department to return or deliver.....	4,115			
		5,772		
Postal Cards received for better address returned to writers or forwarded to address.....	2,086			
Postal Cards destroyed in consequence of the inability of the Department to return or deliver.....	2,951			
		5,037		
			10,809	
Carried forward.....			63,622	896,128

STATEMENT of Letters received at the Dead Letter Branch, Canada,

TABLE No. 1.—Showing the Number of Letters of all kinds

## SUM

Letters on hand on the 30th June, 1890, including those in hands of Postmasters.	4,861
Dead Letters received.....	891,267
Special do .....	77,402
	<hr/> 973,530

JOHN WALSH,  
*Superintendent.*

during the Year ended 30th June, 1891, &c.—*Concluded.*

received, with the disposition made of them—*Concluded.*

How disposed of.	—	—	—	—
Brought forward.....			63,622	896,128
SPECIAL LETTERS— <i>Concluded.</i>				
Circulars received for postage, returned to senders.....	2,508			
do do destroyed.....	349			
		2,857		
do received for better address, returned to senders				
or forwarded to address .....	636			
do received for better address, destroyed.....	1,141			
		1,777		
			4,634	
Books, Parcels, &c., held for postage, address, enclosures,				
or not called for, returned to senders .....		1,553		
Books, Parcels, &c., held for postage, address, enclosures,				
or not called for, sent to address .....		3,701		
Books, Parcels, &c., held for postage, address, enclosures,				
or not called for, destroyed, being of no value, and				
the Department being unable to deliver or return.....		2,080		
Books, Parcels, &c., held for postage, address, enclosures,				
or not called for, remaining on hand (including balance				
of previous years) on 30th June, 1891.....		1,812		
			9,146	
				77,402
Grand Total.....				973,530

MARY.

Dead Letters disposed of.....	894,251
Special do .....	74,635
Letters on hand, 30th June, 1891, including those in hands of Postmasters.....	4,644
	<u>973,530</u>

WILLIAM WHITE,  
*Deputy Postmaster General.*



TABLE No. 2.—Showing the number of Letters received containing Money or other enclosures of value; the amount and nature of their contents; the number of such Letters delivered during the Year, and the number remaining undelivered.

No. of Letters received during the Year ended 30th June, 1891.	Nature of Contents.	Value of contents of Letters received during the Year ended 30th June, 1891.	No. of Letters delivered of those received during the Year ended 30th June, 1891.	No. of Letters undelivered on 30th June, 1891, and now lying unclaimed in D. L. Branch.	No. of Letters undelivered on 30th June, 1891, and now in hands of Postmasters awaiting claim.
		\$ cts.			
3,295	Money (including \$6.05 enclosed in Letters under other heads) .....	18,278 82	3,064	198	33
51	Bills of Exchange .....	8,357 74 $\frac{3}{4}$	51		
5	Bonds .....	20,600 00	4		
491	Cheques .....	50,503 16	481	9	1
2	Coupons .....	10 71	2		
284	Drafts .....	31,753 25	280	4	
1	I. O. U. ....	50 00	1		
625	Money Orders .....	11,638 56	610	8	7
69	Orders .....	3,738 36	64	5	
8	Passage Certificates .....	505 15	7	1	
372	Promissory Notes .....	78,956 35	361	10	1
668	Receipts .....	65,873 61	639	27	2
14	Stock Certificates .....	4,400 00	14		
31	Various Certificates .....	7,770 36	29	2	
514	Registered Letters sent to Dead Letter Office, London, England .....		514		
401	Registered Letters sent to Dead Letter Office, Washington, U.S.A. ....		401		
26	Registered Letters sent to Dead Letter Offices other countries .....		26		
60	Deeds .....		58	1	1
1	Deed, unsigned .....		1		
74	Documents of value .....		72	1	1
1	Certificates—A.O.F.F. Society .....		1		
5	do A.O.U.W .....		5		
2	do Army and Navy Burial Society .....		2		
1	do Band of Hope .....		1		
8	do Baptism .....		8		
1	do B. C. Marine Engineers Assn. ....		1		
1	do Bonus .....		1		
1	do Builders .....		1		
49	do Character .....		43	6	
2	do Chinese Immigration Leave .....		1	1	
18	do Church Membership .....		18		
1	do Club .....		1		
3	do C. M. A. Membership .....		3		
3	do C. O. F. ....		3		
2	do College Examination .....		1	1	
7	do Collegiate Institute .....		7		
7	do Commercial Travellers' Assn. ....		7		
1	do Confirmation .....		1		
1	do Court of Appeal .....		1		
4	do Death .....		4		
1	do Departmental Examination .....		1		
1	do Discharge of Judgment .....		1		
1	do Endowment .....		1		
2	do Engineers .....		2		
1	do Good Templars .....		1		
1	do Health .....		1		
1	do Imperial Federation League .....		1		
20	do I. O. O. F. ....		20		
1	do Iron Moulders' Union .....		1		
2	do Knights of Labour .....		1	1	
1	do Knights of Pythias .....		1		
2	do Law .....		2		
2	do Locomotive Engineers .....		1	1	

TABLE No. 2.—Showing the number of Letters received containing Money or other enclosures of value, &c.—*Continued.*

No. of Letters received during the Year ended 30th June, 1891.	Nature of Contents.	Value of contents of Letters received during the Year ended 30th June, 1891.	No. of Letters delivered of those received during the Year ended 30th June, 1891.	No. of Letters undelivered on 30th June, 1891, and now lying unclaimed in D. L. Branch.	No. of Letters undelivered on 30th June, 1891, and now in hands of Postmasters awaiting claim.
		£ cts.			
15	Certificates, Marriage.....		14	1	
7	do Masonic.....		7		
1	do Masonic Grand Chapter.....		1		
8	do Medical.....		8		
2	do Medical Examination.....		2		
1	do Military Instruction.....		1		
5	do Naturalization.....		3	2	
1	do N.W. Half-breed Commission.....		1		
9	do Orange Lodge.....		8	1	
1	do Ownership.....		1		
1	do Painters and Decorators of America.....			1	
1	do Passengers, Steamship.....		1		
1	do Pathmaster.....		1		
1	do Patrons of Industry.....		1		
3	do Pedigree of Stock.....		3		
6	do Pre-emption (Record).....		6		
1	do Registry.....		1		
2	do Relief Society.....		2		
2	do Sailing Club.....		2		
1	do Sailor and Fireman's Union.....			1	
1	do Scholars.....		1		
1	do School Returns.....		1		
1	do Seaman's.....		1		
3	do Seaman's Discharge.....		2	1	
1	do Select Knights.....		1		
1	do Sheriffs.....		1		
1	do Sons of Temperance.....		1		
2	do Steamboat Inspection.....		2		
1	do Supreme Court.....		1		
3	do Taxes.....		3		
18	do Teachers.....		18		
2	do Timber.....		2		
1	do Train Despatchers.....		1		
1	do Transfer Card.....		1		
1	do Typographical Union.....		1		
1	do University of Toronto.....		1		
1	do Weights and Measures.....		1		
4	do Work performed.....		3	1	
3	Abstracts of Title.....		2	1	
1	Account Book.....		1		
21	Affidavits.....		20	1	
1	Agents Collection Book.....		1		
29	Agreements.....		26	3	
3	Applications C.O.F.....		3		
3	Aprons.....		3		
1	Asbestos Pipe.....		1		
1	Assessment Papers.....			1	
5	Assignments.....		5		
1	Automatic Pencil.....		1		
2	Baggage Checks.....		1		1
1	Barometer.....		1		
1	Bead Chain.....		1		
1	Bible.....		1		
2	Bills of Sale.....		2		
3	Boating Club Tickets.....		3		
1	Booklet.....		1		
18	Books.....		17	1	
3	Boots.....		3		
1	Bracelet (coin).....		1		

TABLE No. 2.—Showing the number of Letters received containing Money or other enclosures of value, &c.—*Continued.*

No. of Letters received during the Year ended 30th June, 1891.	Nature of Contents.	Value of contents of Letters received during the Year ended 30th June, 1891.	No. of Letters delivered of those received during the Year ended 30th June, 1891.	No. of Letters delivered on 30th June, 1891, and now lying unclaimed in D. L. Branch.	No. of Letters delivered on 30th June, 1891, and now in hands of Postmasters awaiting claim.
		£    cts.			
1	Breast Pin (mother of pearl).....		1		
1	do (gold plated).....			1	
1	Briar-root Pipe.....		1		
4	Brooches (gilt).....		4		
1	Card (fancy).....		1		
1	do (Christmas).....		1		
1	Catalogue (fruit).....		1		
1	Chalice.....		1		
1	Cheque Book.....		1		
1	Child's Dress.....		1		
1	Clock Spring.....		1		
3	Cloth.....		3		
2	Coats.....		1		1
2	Contracts.....		2		
1	Crochet Collar.....		1		
4	Crown Land Grants.....		4		
1	Crucifix.....		1		
3	Cuff Buttons (Gilt).....		3		
1	Debenture.....		1		
3	Declarations.....		3		
1	Diamond Breast Pin.....		1		
1	do Glass Cutter.....		1		
9	Diplomas.....		9		
7	Discharges.....		7		
1	do of Estate.....		1		
1	Doll.....		1		
5	Ear Drums.....		5		
4	Ear Rings (Gilt).....		2	2	
1	Electrotype.....		1		
1	Emerald Stone.....			1	
1	Eye Glass.....			1	
1	False Beard.....		1		
1	do Teeth.....		1		
1	Fan.....			1	
2	Fancy Work.....		2		
1	Fish Line.....		1		
2	Fountain Pens.....		2		
2	Fur Caps.....		2		
7	Gloves.....		6	1	
1	Gold Amalgam.....		1		
10	Gold Jewellery—Bracelets.....		9	1	
9	do Brooches.....		7	2	
8	do Chains.....		7	1	
1	do Commemoration Coin.....			1	
1	do Cuff Buttons.....		1		
3	do Ear-rings.....		1	2	
75	do Finger Rings.....		63	12	
1	do Glove Buttoner.....		1		
6	do Lockets.....		6		
1	do Medal.....		1		
1	do Pencil.....			1	
9	do Pins (Breast).....		6	3	
1	do do (Emblem).....			1	
3	do do (Scarf).....		2	1	
1	do Rim of Watch Case.....		1		
1	do Seal.....		1		
3	do Spectacles.....		2	1	
7	do Studs.....		5	2	
1	do Tooth Picks.....		1		
13	do Watches.....		13		



TABLE No. 2.—Showing the number of Letters received containing Money or other enclosures of value, &c.—*Continued.*

No. of Letters received during the Year ended 30th June, 1891.	Nature of Contents.	Value of contents of Letters received during the Year ended 30th June, 1891.	No. of Letters delivered of those received during the Year ended 30th June, 1891.	No. of Letters undelivered on 30th June, 1891, and now lying unclaimed in D. L. Branch.	No. of Letters undelivered on 30th June, 1891, and now in hands of Postmasters awaiting claim.
		£ cts.			
1	Gold Nugget.....		1		
1	do Penholder.....		1		
5	do Pens.....		5		
1	Grease.....		1		
1	Gum.....		1		
2	Hair Combs (Fancy).....		2		
2	Handkerchiefs.....		2		
1	Hat, Lady's.....		1		
2	Indentures.....		2		
109	Insurance Policies.....		107	2	
1	I. O. O. F. Badges.....		1		
4	Keys.....		2	2	
1	Kid Boots.....		1		
1	Knee Cap.....		1		
3	Knives.....		1	2	
1	Lace.....		1		
11	Leases.....		11		
111	Legal Documents.....		104	6	1
1	License Bond.....		1		
4	Licenses.....		4		
3	do Fishery.....		3		
2	Linen Handkerchiefs.....			2	
42	Lottery Tickets.....		42		
1	Magnifying Glass.....		1		
1	Maple Sugar.....		1		
1	Maple Syrup.....		1		
1	Martin Skins.....		1		
2	Medals.....		1	1	
4	Medicine.....		1	3	
2	Meerscham Pipes.....		2		
1	Merchants Protective Books.....			1	
1	Mica.....		1		
5	Minerals.....		4	1	
1	Moccasins.....		1		
1	Model Bee Hive.....		1		
20	Mortgages.....		20		
3	do Chattel.....		3		
2	do Release of.....		2		
4	Newspapers.....		4		
1	Oil Paintings.....		1		
1	Old Coins.....		1		
1	Old Letters.....		1		
4	Ornaments for Axle Ends.....		4		
1	Padlock.....		1		
1	Painting on Satin.....		1		
1	do Velvet.....		1		
5	Passes.....		5		
13	Pass Books.....		13		
34	do Bank.....		34		
2	do Building and Loan.....		2		
5	do Savings Bank.....		4	1	
2	Patents.....		2		
1	Patterns.....		1		
3	Pawn Brokers Tickets.....		2	1	
1	Pension Papers.....		1		
22	Permits.....		22		
6	Photographs.....		6		
1	Plush Bag.....		1		
4	Pocket Books.....		4		
14	Postage Stamps (cancelled).....		14		

TABLE No. 2.—Showing the Number of Letters received containing Money or other enclosures of value, &c.—*Continued.*

No. of Letters received during the Year ended 30th June, 1891.	Nature of Contents.	Value of contents of Letters received during the Year ended 30th June, 1891.		No. of Letters delivered of those received during the Year ended 30th June, 1891.	No. of Letters undelivered on 30th June, 1891, and now lying unclaimed in D. L. Branch.	No. of Letters undelivered on 30th June, 1891, and now in hands of Postmasters awaiting claim.
		\$	cts.			
9	Postal Cards.....			9		
1	Powder.....			1		
1	Powder Flask.....			1		
12	Powers of Attorney.....			12		
4	Prayer Beads.....			4		
2	Probate of Will.....			2		
27	Railway Passes.....			11	16	
76	do Tickets.....			43	33	
1	Rebate Ticket.....			1		
3	Registered Letters.....			3		
2	Ribbons.....			2		
1	Rifle Sight.....			1		
2	Rings (Brass).....			1	1	
11	do (Gilt).....			8	3	
1	Roots.....			1		
2	Rubbers.....			2		
1	Sailor's Chart.....			1		
2	Salvation Army Documents.....			2		
2	Scapulars.....			2		
1	Scarf.....			1		
2	Scarf Pins (Gilt).....				1	1
1	Seeds (Garden).....				1	
1	Serge Jacket.....			1		
1	Sewing Machine Tucker.....			1		
1	Shawl.....			1		
1	Shell Clasp.....				1	
3	Shoes.....			3		
1	Shuttle.....			1		
18	Silk Handkerchiefs.....			17	1	
1	do Stockings.....			1		
1	do Table Cover.....			1		
1	do Thread.....			1		
2	do Ties.....				2	
1	Silver Bowl.....			1		
1	do Fruit Knife.....			1		
1	Silver Jewellery, Beetle.....			1		
2	do Bracelets.....			2		
5	do Brooches.....			4	1	
2	do Chains.....			2		
1	do Cross.....			1		
2	do Finger Rings.....			1	1	
3	do Pins.....			2	1	
1	do Rattle.....			1		
3	do Thimble.....			2	1	
21	do Watches.....			20	1	
1	Silver Knife.....			1		
7	do Napkin Rings.....			3	4	
1	do Rivet.....			1		
4	do Spoons.....			3	1	
1	Skirt.....			1		
4	Spectacles.....			3	1	
1	Spirit Level.....			1		
1	Spoon (Plated).....			1		
3	Spurs.....			3		
1	Stencil Plate.....			1		
5	Summonses.....			5		
1	Table Cloth.....				1	
1	Templar's Jewel.....			1		
3	Testimonials.....			3		
2	Tobacco Pouches.....			2		

TABLE No. 2.—Showing the Number of Letters received containing Money or other enclosures of value, &c.—*Concluded.*

No. of Letters received during the Year ended 30th June, 1891.	Nature of Contents.	Value of contents of Letters received during the Year ended 30th June, 1891.	No. of Letters delivered of those received during the Year ended 30th June, 1891.	No. of Letters undelivered on 30th June, 1891, and now lying unclaimed in D. L. Branch.	No. of Letters undelivered on 30th June, 1891, and now in hands of Postmasters awaiting claim.
		\$ cts.			
1	Toy Caliper .....			1	
2	Transfers .....		2		
1	Trousers .....		1		
1	Truss .....		1		
10	Unopened Letters .....		10		
2	do Packets .....		2		
1	Vest .....		1		
1	Watch Chain (Gilt) .....		1		
1	do (Silk) .....		1		
1	Watch Charm .....		1		
1	Watch, Copper .....		1		
1	do Nickel .....		1		
1	do Toy .....			1	
3	Watch Works .....		3		
2	Wigs .....		2		
5	Wills .....		3	2	
1	Wool .....		1		
3	Woollen Jackets .....		2	1	
1	do Shirt .....			1	
7	do Socks .....		5	2	
3	do Yarn .....		3		
4	Writs .....		4		
8,400		302,436 07 $\frac{1}{2}$	7,923	427	50
	Add to these ordinary Registered letters not enumerated above, and letters containing value not enumerated above, which have been returned, forwarded, or otherwise disposed of as shown in Table 1. ....		8,901	149	27
9,077			16,824	576	77
	Grand total of letters containing value disposed of .....		576		
	Grand total of letters remaining unclaimed in Dead Letter Branch .....		77		
	Grand total of letters in hands of Postmasters .....				
17,477			17,477		

375 Letters remained in hands of Postmasters on 30th June, 1890, and all of these have since been satisfactorily accounted for.

WILLIAM WHITE,  
Deputy Postmaster-General.

JOHN WALSH,  
Superintendent.



## ANNUAL STATEMENT 1890-91.

POST OFFICE DEPARTMENT, CANADA,  
PRINTING AND SUPPLY BRANCH,  
OTTAWA, 15th August, 1891.

The Honourable

The POSTMASTER GENERAL.

SIR,—I have the honour to submit for your information the annual statement, with accompanying tables, exhibiting in full the transactions of this Branch during the year 1890-91.

For purposes of comparison the increase and decrease in quantity and cost in each case, for 1889-90 and 1890-91, are below given under the respective heads by which the different classes of work coming within the control of this Branch are designated.

*Printing, Binding, Lithographing, &c.*

	<i>Quantity.</i>		<i>Cost.</i>
1889-90.....	23,753,654	1889-90.....	\$45,955.70
1890-91.....	20,424,114	1890-91.....	45,120.21
Decrease 1890-91.....	3,329,540	Decrease 1890-91.....	\$ 835.49

The decrease in quantity under this head is chiefly explained by the falling off in the number of letter bills issued, a "general issue" to the entire outside service of these forms having taken place upon the introduction of the new forms of letter bills in 1889-90, whilst, during the year 1890-91, the ordinary current demands only for these bills had to be provided for.

It is also to be observed that during the year 1890-91 there were fewer changes than in the previous year in the working of the postal system demanding the introduction of new forms, books, envelopes, &c.

The results for the year under this head show, however, an increase in quantity in connection with envelopes and books (principally Savings Bank pass books not hitherto held in stock) which, although numerous, were not costly.

An amount of \$2,416.95 for printing for the Post Office Savings Bank (inside service) forms a new charge in this statement, such printing having, prior to 1st September, 1890, been ordered and obtained by that Branch from the Printing Bureau direct.

The appropriation for 1890-91 having been exhausted, the June accounts (\$6,254.37) were accordingly paid out of the vote for 1891-92, hence a decrease for 1890-91 of \$835.49, instead of what would otherwise have been an increase of \$5,418.88.

*Stationery.*

	<i>Quantity.</i>		<i>Cost.</i>
1889-90.....	489,746	1889-90.....	\$14,467.24
1890-91.....	474,172	1890-91.....	12,987.94
Decrease 1890-91.....	15,574	Decrease 1890-91.....	\$ 1,479.30

The adoption of the new permanent label case attachment, for mail bags, together with the cardboard label accessory, which can be utilized an indefinite number of times, and which is intended to supersede the various other descriptions of labels hitherto in use, was the means chiefly of the reduction in quantity under this head, a large falling off being noticeable in the consumption of shipping and other tags, each of which could serve the purpose of a label once only.

Owing to the payment of the accounts for stationery, as in the case of those for printing, for June (\$2,368.48), out of the vote for the current, instead of for the previous fiscal year, there was a decrease in cost of \$1,479.30, instead of a slight increase for the year, as would otherwise have been the case, of \$889.18.

It may here be noted that the stationery for the Savings Bank Branch, which had previously been procured by that Branch directly from the Stationery Office, was, from 23rd September, 1890, ordered and delivered through this Branch, the cost of the same amounting to \$212.45, and forming, for the year under consideration, a new charge in this statement.

*Mail Bags, Labels, &c.*

	<i>Quantity.</i>		<i>Cost.</i>
1890-91.....	47,738	1890-91.....	\$29,737.28
1889-90.....	28,767	1889-90.....	17,707.41
Increase 1890-91.....	18,971	Increase 1890-91.....	\$12,029.87

In order to complete the present needs of the Customs Department in connection with dutiable mail matter, 753 special blue linen bags, costing \$1,395.38, were made for, and furnished to, that Department.

The adoption of the new fastenings ("wax seal cup" and "bolt" padlock), with iron label case attachment, with a view to increased security—the old fastenings having been found to permit of the mails being tampered with—for bags for ordinary mail matter, and for the red striped bags in connection with the new registration system, necessitates the use of special grommets or eyelets. These the contractors were unable to obtain until the new fiscal year had been entered upon, hence an item for \$3,685.92, for bags ordered prior to 1st July, 1890, formed a charge against the year 1890-91.

Mail bags, fitted with the new fastenings, were, during the year, furnished to the Provinces of New Brunswick and Prince Edward Island, and the old patterns in each case re-called, these two Provinces having taken 1,490 bags, at a cost of \$1,946.90, the other Provinces absorbing the balance issued.

The number of cotton duck bags of the old pattern which found their way back to the Branch during the year, and were converted from the old to the new fastenings, with iron label case attachment, was 3,893, costing \$4,009.79.

The use of the combined label case and fastener ("slip label case"), in the United States Post Office for many years past having demonstrated its superiority over the simple cord for tying the newspaper sacks, its adoption in Canada also was determined upon, the Chief Post Office Inspector having strongly favoured the change. Three thousand of the same, at a cost of \$810.00, were accordingly procured within the year.

The repair of bags of all classes in 1890-91 showed an increase over the previous year of \$773.56, the details of this item being as follows:—

	Leather. Quantity.	Cost.	Cotton Duck. Quantity.	Cost.	Linen (red striped registered). Quantity.	Cost.	Jute. Quantity.	Cost.	Carriers' Satchels and Pouches. Quantity.	Cost.
1890-91 .....	50	\$45.00	3,983	\$1,672.86	154	\$64.98	9,954	\$3,981.60	99	\$41.58
1889-90 .....	31	27.90	3,212	1,349.04	...	...	9,122	3,648.80	16	6.72
Increase .....	19	\$17.10	771	\$323.82	154	\$64.98	832	\$332.80	83	\$34.86

The number of bags of all classes condemned upon inspection as being unfit for repair, or further use, and burnt, during the past two years was:—

	Leather.	Cotton Duck.	Jute.	Satchels and Pouches.
1889-90 .....	19	1,172	665	28
1890-91 .....	15	948	601	50
Total .....	34	1,120	1,266	78

#### Letter Carriers' Uniforms.

	Quantity.	Cost.
1890-91 .....	5,187	\$14,469.21
1889-90 .....	3,914	14,043.93
Increase 1890-91 .....	1,273	\$ 425.28

During the year there were 52 new Carriers added to the staff, bringing the total number supplied with uniform at the expense of the Department up to 393, by which it will appear that the increase in quantity and cost shown was not more than normal.

That the work done, and material furnished, by the contractors gave satisfaction may be inferred from the fact that no complaints were received during the year in respect to any article of uniform which, after inspection, had been accepted by the Branch.

It became necessary, however, in one or two instances to reject the boots furnished as not being equal to the standard set by the samples, but the defective articles were in all cases replaced by new ones fulfilling the Departmental requirements.

#### Stamping Material, Seals and Weights, &c.

	Quantity.	Cost.
1889-90 .....	195,759	\$12,645.67
1890-91 .....	53,396	10,283.55
Decrease 1890-91 .....	142,363	
Increase 1890-91 .....		\$ 2,362.12

The attention of the Department having been arrested by the defective postmarking of letters, &c., very largely prevailing in the Post Offices, a general circular was issued to Postmasters requiring them to furnish impressions of their office stamps, and to state whether new ones were required, in order to the end that by the supply, where necessary, of new stamps or stamping material, the legible and efficient postmarking of all mail matter might for the future be ensured. This resulted in demands being received for new office stamps from all parts of the Dominion, which in all needful cases were promptly complied with.

It is worthy of note here that what are believed to be the last of the old "U.C." and "C.W." (Upper Canada and Canada West), and "L.C." and "C.E." (Lower Canada and Canada East), office stamps, were sent into the Branch as a result of the circular above alluded to.

The item of mail locks showed a decrease of \$712.00 for the year, owing to the old locks already issued being kept in circulation as a result of the general circular on the subject which was sent out to Inspectors and Postmasters in 1889-90, whereby the purchase, and issue, of so many new locks as in former years was rendered unnecessary.

The substitution of the new fastenings for bags for registered mail matter has so far proceeded as to allow of the permanent discontinuance of the lead rivet bag seal hitherto employed for this purpose, the quantity consumed having fallen from 170,000 (\$680.00), in 1889-90 to 16,250 (\$80.00), in 1890-91, which principally accounts for the decrease in quantity above indicated.

The expenditure for street letter boxes rose to \$1,096.90, 140 boxes having been issued during the year as against 52 boxes, costing \$629.70, sent out in 1889-90. The more important points affected by this increase were the city of Hamilton (20 boxes), and the city of Winnipeg (12 boxes), the new and improved boxes having been substituted for the old and defective patterns in those cities. New letter boxes were also provided, and set up, in New Westminster (6), and Nanaimo, B.C. (6), to meet the extension of the service to those places.

Four items appear in this statement, *i.e.*, parcel post hampers (\$277.69), sortation baskets (\$136.40), and mail catching posts (132.04), which, hitherto, have not formed a charge herein. Twenty-four hampers were obtained from the General Post Office, London, of which 6 were issued for the new parcel post service between Japan and the Dominion, the remainder being held in reserve here to meet any possible unforeseen emergency.

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It may not be out of place here to record the fact that due acknowledgment was made of the Canadian Post Office exhibit, prepared by your authority and direction, for the Postal Museum at Washington, and for the Jamaica Exhibition, respectively, in the case of the latter by the awarding to the Department of a Certificate of Honour at the hands of the Exhibition authorities, and, in that of the former, by the special thanks of the Postmaster General of the United States addressed to yourself, and supplemented by highly appreciative press comments, the tenor of which is indicated by the following excerpt from a Washington Associated Press despatch :—

“CANADIAN POSTAL OUTFITS.”

“WASHINGTON, May 23.—In compliance with a request of Postmaster General Wanamaker, the Canadian postal authorities at Ottawa have sent to the Department at Washington a very handsome collection of letter carriers' outfits. They consisted of summer helmets, winter garments, rainy weather clothes, leggings, bags, letter box, seal and box clasp. These are to be placed in the Postal Museum here along with other collections previously donated. Those received to-day are a credit to the Dominion, and by all who saw them were highly praised for their beauty and durability. In due time the Postmaster General will make suitable acknowledgment to the Canadian authorities for the handsome collection.

All of which is respectfully submitted.

SIDNEY SMITH,  
*Superintendent.*



GENERAL SUMMARY of payments made for *Printing, Stationery, Mail Bags, Letter Carriers' Uniforms, Stamping Material, Scales and Weights, &c.*, supplied to the Department at Ottawa, and to the different Provinces of the Dominion, through the Printing and Supply Branch, Post Office Department, from 1st July, 1890, to 30th June, 1891.

	\$	cts.	\$	cts.
<i>a</i> Printing, Binding, Lithographing, &c.—				
Queen's Printer's Accounts, <i>Civil Government (Contingencies, inside service)</i>	9,258	36		
Queen's Printer's Accounts ( <i>outside service</i> )	35,685	55		
St. John " <i>Sun</i> " (time bills for mail routes in New Brunswick).....	176	30		
			45,120	21
<i>b</i> Stationery—				
Stationery Office Accounts, <i>Civil Government (Contingencies, inside service)</i>	2,586	96		
Stationery Office Accounts ( <i>outside service</i> ).....	10,400	98		
			12,987	94
Mail Bags, Labels, &c. ....			29,737	28
Letter Carriers' Uniforms . . . . .			14,469	21
Dated Stamps, Seals, &c. ....			7,016	12
Scales and Weights . . . . .			1,350	00
Mail Locks, Keys and Lead Seals . . . . .			875	25
Street Letter Boxes . . . . .			1,947	24
Sortation Baskets, Mail Clerks' Tin Boxes and Miscellaneous Articles. ....			1,457	06
Total . . . . .			114,960	31
<i>a b</i> Not shown above—				
<i>Printing, &amp;c.</i> , for M. O. Branch, <i>Civil Government (Contingencies, inside service)</i>				
obtained by requisition from that Branch direct to the Queen's Printer.....	\$	1,121	30	
<i>Printing, &amp;c.</i> , for S. B. Branch do do		698	70	
			\$	1,820 00
<i>Stationery</i> for M. O. Branch do Stationery Office do		102	16	
<i>Stationery</i> for S. B. Branch do do do		43	69	
			145	85
			\$	1,965 85

WILLIAM WHITE,  
*Deputy Postmaster-General.*

SIDNEY SMITH,  
*Superintendent.*

STATEMENT showing the transactions in connection with *Printing, Binding, &c.*, from 1st July, 1890, to 30th June, 1891.

	Forms.	Envelopes	Books.	Cards and Labels.	Writing Paper (reams.)	Miscel- laneous.	Value.
							\$ cts.
Balance in stock 30th June, 1890..	5,611,644	1,661,302	53,434	802,145	160		14,078 93
Received from Queen's Printer....	14,617,153	2,691,790	80,256	2,886,238	263	148,414	*45,120 21
Total . . . . .	20,228,797	4,353,092	133,690	3,688,383	423	148,414	59,199 14
Issued to the Department at Ottawa	796,221	590,650	2,750	39,756	89	117,727	6,870 60
do different Provinces....	13,761,752	1,997,388	48,362	2,871,416	196	30,687	43,897 00
Total issued.....	14,557,973	2,588,038	51,112	2,911,172	285	148,414	50,767 60
Obsolete Articles destroyed. ....	68,428	500	608				275 00
Balance in stock 30th June, 1891..	5,602,396	1,764,554	81,970	777,211	138		8,156 54

\*June account for printing amounting to \$6,254.37 paid from appropriation for 1891-92.

SIDNEY SMITH,  
*Superintendent.*

WILLIAM WHITE,  
*Deputy Postmaster-General.*

## STATEMENT showing the transactions in connection with Stationery, from 1st July, 1890, to 30th June, 1891.

	Books.	Scratch Books.	Almanacs.	Envelopes.	Writing Paper, (reams.)	Blotting Paper, (reams.)	Wrapping Paper (reams.)	Newspaper Bands.	Elastic Bands, (boxes.)	Pens, (boxes.)	Penholders.	Lead Pencils.	Leads for Pens-cils, (boxes.)	Ink, (bottles.)	Ink Wells.	Mucilage, (bot-tles.)	Gum Arabic, (lbs.)	Mucilage Wells.	Mucilage Brushes.	Wax Bougies.
Balance in stock, 30th June, 1890.	26	60	...	...	2	9	5	2,500	730	2,152	3,344	10,624	738	951	258	363	239 $\frac{1}{2}$	48	92	587
Stationery received during the year	1,773	1,595	94	21,400	90 $\frac{8}{10}$	50 $\frac{5}{10}$	619 $\frac{5}{10}$	7,600	730	2,152	3,344	10,624	738	951	258	363	239 $\frac{1}{2}$	48	92	49
Total.	1,799	1,655	94	21,400	92 $\frac{1}{10}$	50 $\frac{5}{10}$	624 $\frac{5}{10}$	10,100	730	2,152	3,344	10,624	738	1,019	258	372	242 $\frac{1}{2}$	48	92	636
Issued to the Department at Ottawa	469	48	90	12,137	36 $\frac{1}{10}$	16 $\frac{5}{10}$	63 $\frac{1}{10}$	9,050	156	546	443	1,275	46	250	78	53	104	10	15	2
do different Provinces.	1,306	1,263	2	100	54 $\frac{3}{10}$	40 $\frac{5}{10}$	553 $\frac{5}{10}$	...	574	1,606	2,901	9,305	692	699	180	310	127 $\frac{1}{2}$	38	77	481
Total issue.	1,769	1,311	92	12,237	90 $\frac{8}{10}$	56 $\frac{1}{10}$	620 $\frac{5}{10}$	9,050	730	2,152	3,344	10,580	738	949	258	363	231 $\frac{1}{2}$	48	92	483
Balance in stock, 30th June, 1891.	30	344	2	9,163	2	21 $\frac{5}{10}$	31 $\frac{5}{10}$	1,050	...	...	...	44	...	70	...	9	11	...	...	153

	Carbon Paper, (sheets.)	Twine, (lbs.)	Sealing Wax, (lbs.)	Knives.	Erasers.	Scissors.	Sponges.	Sponge Cups.	Red Tape, (hanks.)	Pins, (packages.)	Paper Fasteners, (boxes.)	Tags, Cards and Labels.	Official Seals, (boxes.)	Type Writers.	Blotting Pads.	Envelope Damp-ers.	Miscellaneous.	Cost.
Balance in stock, 30th June, 1890.	...	105	52	...	...	...	...	108	...	...	...	...	...	...	9	...	120	\$
Stationery received during the year	1,817	16,474 $\frac{1}{2}$	3,845	391	637	161	475	108	112	550	200	390,402	181	7	146	224	5,628	276 88
Total	1,817	16,579 $\frac{1}{2}$	3,897	391	637	161	475	108	112	550	200	390,402	181	7	155	224	5,748	*12,987 94
Issued to the Department at Ottawa	100	504 $\frac{3}{4}$	187	62	86	35	78	10	61	150	75	572	7	3	19	6	2,333	2,609 84
do different Provinces.	1,382	16,032 $\frac{1}{2}$	3,700	329	551	126	397	98	51	400	125	389,830	174	4	128	218	3,315	10,400 98
Total issue	1,482	16,537 $\frac{1}{4}$	3,887	391	637	161	475	108	112	550	200	390,402	181	7	147	224	5,648	13,010 82
Balance in stock, 30th June, 1891.	335	42 $\frac{1}{4}$	10	...	...	...	...	...	...	...	...	...	...	...	8	...	100	254 00

\*June, 1891, account for Stationery, \$2,368.48, paid from appropriation for 1891-92.

WILLIAM WHITE, Deputy Postmaster-General.

SIDNEY SMITH, Superintendent.



STATEMENT showing the transactions in connection with Mail Bags and Labels, from 1st July, 1890, to 30th June, 1891.

	Leather Mail Bags.	Red Striped and Blue Linen Bags, with Wax Sealing Cup and Bolt Fastening.	Cotton Duck Bags, with Bolt Padlock Fastening.	Cotton Duck Bags, with Wax Seal Cup and Bolt Fastening.	Cotton Duck Bags, without Fastening.	Leather Duck Bags, without Fastening.	Waterproof Cotton Duck Bags, without Fastening.	Bolt Padlock Cotton Duck Bags, without Fastening.	Seamless Cotton Bags.	Jute Newspaper Sacks.	Leather Satchels.	Waterproof Cotton Duck Satchels.	Cotton Duck Letter Pouches.	Reversible Leather Labels.	Combined Wood and Leather Reversible Labels.	Leather.	Cotton Duck.	Linen (red striped registered).	Jute Newspaper Sacks.	Satchels.	Red Striped Bags fitted with "Bolt" attachment.	Bags converted into Bolt Padlock Fastenings.	Cotton Duck Bags converted into "Bolt" and Wax Seal Cup Fastening.	Wooden Tags.	Ship Label Cases.	Cost.		
Balance in stock, 30th June, 1890.										2,000							3,983	154	9,954	99		2,172	3,893	48	5,781	3,000	29,737	28
Received during the year.	144	2,688	3,025	993	200	258	122	792	4,882	50	120	267	3,342	170	50	3,983	154	9,954	99		2,172	3,893	48	5,781	3,000	31,462	28	
Total	144	2,688	3,025	993	200	258	122	792	6,882	50	120	267	3,342	170	50	3,983	154	9,954	99		2,172	3,893	48	5,781	3,000	31,462	28	
Issued during the year	144	2,688	3,025	993	200	258	122	792	4,882	50	120	267	3,342	170	50	3,983	154	9,954	99		2,172	3,893	48	5,781	1,208	29,245	44	
Issued from stock during the year									500																	431	00	
Total	144	2,688	3,025	993	200	258	122	792	5,382	50	120	267	3,342	170	50	3,983	154	9,954	99		2,172	3,893	48	5,781	1,208	29,676	44	
Balance in stock, 30th June, 1891.									1,500																1,992	1,785	84	

SIDNEY SMITH,  
Superintendent.

WILLIAM WHITE,  
Deputy Postmaster-General.



## STATEMENT showing transactions in connection with Letter Carriers' Uniforms from 1st July, 1890, to 30th June, 1891.

	GARMENTS. MONOGRAMS.				WATERPROOF COATS.		Oil-skin Capes.	Summer Helmets.	Cloth Caps.	Waterproof Cap Covers.	Fur Caps.	Fur Collarettes.	Chamois and Fibre-cloth Vests.	Waist-belts.	Leather Leggings (pairs.)	Leather Boots (pairs.)	Rubber Boots (pairs.)	Moccasins (pairs.)	Button Sticks.	Button Brushes.	Lamps.	Straps.	Bathbricks.	Pipe-clay (lbs.)	Sperm Oil for Candles (qts.)	Value.
	(Overcoats.	Tunics.	Trousers.	Small, for Cloth and Fur caps.	Large, for Summer Helmets.	Brass Numbers.	New.	Condemned.																		
Balance in Stock, 30th June, 1890, .....	1	1		172	206		162	1	154	67	178	166			98	1			19	15	26					1,712 30
Received during the year .....	155	634	788	689	144	14	111		200	330	330	172	2	51		795			38	100	100	210	1	5	6	14,469 21
Total .....	156	635	789	841	350	14	273	1	354	397	508	496	172	51	98	796	1	38	119	115	26	210	1	5	6	16,181 51
Issued during the year .....	156	634	788	225	56	14	102		168	213	214	198	172	26	38	795		38	58	58	5	210	1	5	6	14,119 26
Sold .....									1																	1 83
Total .....	156	634	788	225	56	14	102		169	213	214	198	172	26	38	795		38	58	58	6	210	1	5	6	14,121 09
Balance in Stock, 30th June, 1891, .....		1	1	616	294		171	1	185	184	294	298		25	60	1	1		61	57	21					2,060 42

WILLIAM WHITE,  
Deputy Postmaster-General.

SIDNEY SMITH,  
Superintendent.







# ANNUAL REPORT

OF THE

# DEPARTMENT OF THE INTERIOR

FOR THE YEAR

1891

*PRINTED BY ORDER OF PARLIAMENT.*



OTTAWA :

PRINTED BY S. E. DAWSON, PRINTER TO THE QUEEN'S MOST  
EXCELLENT MAJESTY

1892.

[No. 13—1891.] *Price 20 cents.*





*To His Excellency the Right Honourable Lord STANLEY of PRESTON, Governor General  
of Canada, &c., &c.*

MAY IT PLEASE YOUR EXCELLENCY:

The undersigned has the honour to lay before Your Excellency the Report of the transactions of the Department of the Interior for the year ending 31st October, 1891.

Respectfully submitted,

E. DEWDNEY,

*Minister of the Interior.*

OTTAWA, 23rd March, 1892.





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ANNUAL REPORT

OF THE

DEPARTMENT OF THE INTERIOR

FOR THE YEAR 1891.

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DEPARTMENT OF THE INTERIOR,

OTTAWA, 21st March, 1892.

To the Honourable EDGAR DEWDNEY,  
Minister of the Interior.

SIR,—I have the honour to submit the annual report of the Department of the Interior for 1891. This report covers the transactions of the Department through all its agencies in Manitoba, the North-West Territories and British Columbia, as well as at the Head Office, up to 31st October last, and it also contains a statement of everything of importance which has happened in relation to the Departmental business up to the close of the calendar year.

INSIDE SERVICE.

Since the date of my last report I have to record, with regret, the death of Mr. F. H. Cowper Cox, of the land patents branch, one of the oldest officials of the Department.

OUTSIDE SERVICE.

Mr. P. V. Gauvreau, Agent of Dominion lands at Edmonton, died on the 7th May, 1891, and, following the practice which has been adopted for some years, the Crown Timber and Crown Land agencies at that point were consolidated, the former Crown Timber Agent, Mr. Thomas Anderson, now performing the duties attaching to both.

The completion of the Calgary and Edmonton Railway has been the means of inducing a large number of people to settle in the country along that line, and it was found necessary to establish a temporary sub-agency at the Red Deer, just half way between the two places named. For this purpose the north half of the Calgary district and the south half of the Edmonton district were, during the settlement season, detached from the respective districts mentioned, and entries for lands in this sub-agency were granted at an office established for that purpose at Red Deer. It is proposed to continue that arrangement this year. A temporary office was also opened during the summer months in the Lake Dauphin district, where lands for homestead purposes have been in great demand for some time, and a prosperous settlement has been established. In both cases the officials placed in charge of the sub-agencies were members of the staff of the outside service, and returned to their regular duties when the immigration season closed.

## CROWN TIMBER OFFICES.

In addition to the change made at Edmonton, as above recited, a similar amalgamation has taken place at Calgary, where the offices of Crown Timber Agent and Dominion Lands Agent are now occupied by Mr. Amos Rowe, the Dominion Lands Agent, without increase of salary.

## PATENTS.

The number of letters patent issued by the Department in each year since 1874, and the number of those issued in each year which have since been cancelled, is shown by the following statement:—

YEAR.	LETTERS PATENT.	
	Number Issued.	Number Cancelled.
Departmental year ending 31st October, 1874.	536	6
do do 1875.	492	4
do do 1876.	375	4
do do 1877.	2,156	13
do do 1878.	2,597	32
do do 1879.	2,194	57
do do 1880.	1,704	41
do do 1881.	1,768	11
do do 1882.	2,866	11
do do 1883.	3,591	16
do do 1884.	3,837	24
do do 1885.	3,257	18
do do 1886.	4,570	17
do do 1887.	4,599	26
do do 1888.	3,275	34
do do 1889.	3,282	30
do do 1890.	3,273	20
do do 1891.	2,449	35

The following is a comparative statement of the homestead and pre-emption entries and sales which have been made at the several agencies of the Department during the years 1890 and 1891:—

1890.	Acres.
Homesteads.....	471,040
Pre-emptions.....	57,600
Sales.....	139,030
1891.	
No. of entries, 3,523, of 160 acres each.....	563,680
Sales.....	189,704

There is a very satisfactory increase, as compared with the preceding year, in the area of land taken up as homesteads by actual settlers. There is also a considerable increase in the area purchased, and at the time of writing everything seems to point to a still further increase under these heads during the coming season. The pre-emption system, it will be remembered, terminated with the calendar year 1889, and the public interest would appear, judging by the experience of the interval, to have been conserved by the change. It is still possible, when a settler desires to increase his holding and proves that he has the means to use a larger area than 160 acres to advantage, to acquire an additional quarter-section by purchase from the Government; but the payment for this additional



quarter-section and the fulfilment of the settlement duties upon the homestead are made to run concurrently, thus preserving the advantages of the pre-emption system without any of its drawbacks. It is also possible always for the settler to increase the size of his farm by purchase from the railway companies owning the odd-numbered sections, which can be had at very reasonable prices.

The following statement shows the number of homestead and pre-emption entries reported in each year since 1874, and the number and proportion of such entries which have been cancelled for non-fulfilment of the conditions of entry :—

YEAR.	HOMESTEADS.			PRE-EMPTIONS.		
	Number of Entries.	Number Cancelled.	Per-centage.	Number of Entries.	Number Cancelled.	Per-centage.
1874.....	1,376	873	63	643	602	93
1875.....	499	299	60	391	226	57
1876.....	347	147	42	263	132	50
1877.....	845	448	53	594	343	57
1878.....	1,788	1,353	75	1,580	903	57
1879.....	4,068	1,994	49	1,729	1,423	82
1880.....	2,074	661	32	1,004	466	46
1881.....	2,753	914	33	1,649	685	41
1882.....	7,883	3,296	44	5,654	2,582	45
1883.....	6,063	1,583	26	4,120	1,149	27
1884.....	3,753	930	24	2,762	720	26
1885.....	1,858	457	24	653	270	41
1886.....	2,657	546	20	1,046	285	27
1887.....	2,036	326	16	585	125	21
1888.....	2,655	414	15	454	93	20
1889.....	4,416	853	19	1,355	228	16
1890.....	2,955	249	8	371		
1891.....	3,523	49	1			

## CORRESPONDENCE.

The following statement shows the number of letters received and sent by the Department in each year since its establishment :—

Year.	Letters Received.	Letters Sent	Total.
1874.....	3,482	4,150	7,632
1875.....	1,974	2,189	4,163
1876.....	2,256	3,097	5,353
1877.....	3,137	3,677	6,814
1878.....	4,642	6,009	10,651
1879.....	5,526	6,179	11,705
1880.....	8,222	9,940	18,162
1881.....	13,665	15,829	29,424
1882.....	25,500	30,300	55,800
1883.....	27,180	33,500	60,680
1884.....	27,525	33,386	60,911
1885.....	33,970	43,997	77,967
1886.....	60,964	67,973	128,937
1887.....	47,845	60,890	108,735
1888.....	43,407	52,298	95,705
1889.....	49,316	50,500	99,816
1890.....	36,200	36,008	72,208
1891.....	38,000	37,267	75,267

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The volume of correspondence of the Department had increased to such dimensions that it could only with inconvenience be handled by the limited staff of clerks charged with classifying the incoming and despatching the outgoing letters, and steps were taken two years ago to reduce it to a minimum. By the system which has been adopted a large reduction in the number of letters, especially between the Department and its various agents and officers of the outside service, has been effected.

Prior to 1890 the number of letters received and sent by the Geological Survey—up till then a branch of this Department—was included in the above statement.

The unusually large correspondence during the years 1886 and 1887 was caused chiefly by the settlement of military bounty warrant, scrip, and other claims arising out of the outbreak in the North-West in 1885.

#### REVENUE STATEMENT.

The usual statement of receipts is submitted, showing the revenue for last year to be nearly the same as for 1889-90.

STATEMENT showing Receipts on account of Dominion Lands, from 1st July, 1872, to 30th June, 1891.

Fiscal Year.	Homestead Fees.	Pre-emption Fees.	Improvements.	SALES.		Map Sales, Office and Registration Fees, &c.	Surveyors' Examination Fees.	Miscellaneous.	Inspection, Cancellation and Sundry Fees.	Timber Dues.
	§ cts.	§ cts.	§ cts.	Cash.	§ cts.	§ cts.	§ cts.	§ cts.	§ cts.	§ cts.
1872-73.	6,960 00			19,170 20						109 25
1873-74.	7,310 00			19,834 75						2,710 55
1874-75.	11,510 00			13,666 90				129 00		2,335 25
1875-76.	4,680 00			3,478 94						387 00
1876-77.	2,250 00			1,085 86						
1877-78.	14,540 00			2,794 86						
1878-79.	17,690 00			4,998 39						
1879-80.	41,255 00			45,708 97						
1880-81.	20,450 00		269 00	71,170 17						
1881-82.	54,155 00		1,758 00	1,240,328 27						
1882-83.	73,015 00		7,114 91	516,092 21						
1883-84.	41,580 00		2,596 11	424,863 36						
1884-85.	25,645 00		2,328 75	199,275 32						
1885-86.	26,110 00		1,101 50	76,140 41						
1886-87.	19,614 00		1,971 55	48,175 76						
1887-88.	23,691 00		1,918 35	52,238 36						
1888-89.	39,460 00		4,128 48	57,513 16						
1889-90.	35,920 00		3,250 54	54,896 85						
1890-91.	29,164 10		6,302 61	91,664 98						
Totals.	494,999 10	206,741 01	32,739 80	2,943,097 72	2,376,107 22	20,037 61	5,508 00	203,734 26	87,147 88	951,966 80



STATEMENT showing Receipts on account of Dominion Lands.—*Concluded.*

Fiscal Year.	GRAZING LANDS.		HAY PERMITS, MINING FEES, STONE QUARRIED, &c.		Rocky Mountains Park of Canada.	COLONIZATION LANDS.		Gross Revenue.	Refunds.	Net Revenue.
	Cash.	Scrip. &c.	Cash.	Scrip.		Cash.	Scrip.			
								\$ cts.	\$ cts.	\$ cts.
1872-73.								26,239 45		26,239 45
1873-74.								29,980 80		29,980 80
1874-75.								27,641 15		27,641 15
1875-76.								8,865 94		8,865 94
1876-77.								140,755 02		140,755 02
1877-78.								139,584 40		139,584 40
1878-79.								234,732 93		234,732 93
1879-80.								206,801 37		202,165 29
1880-81.								206,990 54	4,636 08	201,952 32
1881-82.	2,245 00		40 00			354,036 17		1,805,734 87	10,687 55	1,795,047 32
1882-83.	22,844 43		913 91			248,492 01		1,051,403 60	8,746 05	1,042,657 55
1883-84.	11,370 60		640 90			253,713 40		1,001,776 67	9,220 50	992,556 17
1884-85.	17,089 75		815 63			1,214 22		451,564 65	12,070 85	439,493 80
1885-86.	29,562 51	3,131 08	1,284 83					457,973 95	63,389 12	394,584 83
1886-87.	14,242 77	39,487 67	1,570 40	80 00				588,532 80	19,543 16	568,989 64
1887-88.	5,922 47	23,023 28	2,273 73	80 00	2,951 58		10,000 00	569,986 68	6,377 66	563,709 02
1888-89.	2,207 69	16,802 63	3,946 55		2,528 73		16,000 00	594,088 04	5,226 23	588,861 81
1889-90.	1,305 57	9,021 63	9,242 08		1,094 37			462,536 26	8,209 74	454,326 52
1890-91.	3,079 55	16,193 77	8,628 44	160 00	2,397 35	5 28	4,460 50	460,990 76	7,195 27	453,795 49
Totals.	109,870 34	107,660 06	29,356 47	320 00	8,972 03	857,461 08	30,460 50	8,466,179 88	160,240 43	8,305,939 45

TIMBER, MINERAL AND GRAZING LANDS.

The revenue from the above sources during the past year amounted to \$129,902.67, an increase as compared with 1890 of \$4,024.55. The timber dues are larger than those of 1890 by \$1,749.38, being for this year \$104,700.14. Of the revenue from timber, \$45,994.31 was derived from bonuses, ground rents, royalties, and dues on timber cut from lands in the railway belt in British Columbia, being an increase of \$509.22 over the previous year.

Grazing lands show a revenue of \$16,550.10, being an increase of \$3,952.42. The dues for hay, \$7,701.58, were less than the amount received the previous year by \$2,063.36.

The receipts for minerals other than coal were \$1,259.90, being \$638.90 of an increase over the previous year. The amount received for coal lands was \$2,281, being \$6,617.75 less than the amount received during 1890. The total area of coal lands sold up to date is 13,301.86 acres, and the total sum received therefor, \$137,708.57.

PRICE OF LUMBER.

Following is a comparative statement of the average prices of lumber within the several Crown Timber Agencies within the last seven years. The cost of this article to the settler has been very much reduced within that time, and I do not think any further reduction can reasonably be looked for except at remote points :—

	1885.	1887.	1889.	1891.
	Per M.	Per M.	Per M.	Per M.
Edmonton.	\$25 to \$30	\$15 to \$23	\$20 to \$23	\$10 to \$20
Calgary.	25 to 30	17	12 to 18	12 to 18
Fort Macleod.	30	20 to 40	15 to 43	17 to 40
Prince Albert	30 to 45	21 to 42	20 to 42	20 to 42
Winnipeg.	13.50 25	10 to 40	12.50 40	9 to 19
Cypress Hills	10 to 15	10 to 12	13	10
Lethbridge		30	30	
British Columbia			9 to 10	9 to 10

PRICE OF FUEL.

The Crown Timber Agent at Winnipeg reports that the price of fuel has not varied much from the figures quoted last year, cordwood having brought on an average \$2.25 to \$4.25 per cord for poplar and spruce respectively, and American anthracite coal \$9 per ton on the car; that the Canadian anthracite coal mined at Anthracite, North-West Territories, is growing in public favour, not less than fifty cars of it having been sold in Winnipeg within the last three months at \$8 per ton on the car; that American soft coal is no longer offered on the Winnipeg market, the native coal from Lethbridge and other places in the North-West having taken its place and being sold at \$7 per ton; and that the output at the Souris for the supply of settlers amounted to 632 tons, sold at \$1 per ton at the mouth of the pit.

The agent further reports that as a direct result of an arrangement made by the Government of Manitoba with the Canadian Pacific Railway Company, the latter will supply all demands for coal at a fixed rate, namely, \$1.75 on the car at the mines, and

at the same rate, with freight added, to all parts of the Province; and that the price at Winnipeg will be \$4 per ton on the car, and at Brandon \$3.50. The foundation of this arrangement is the land subsidy granted by the Government of Canada.

The total number of cattle, horses and sheep in the Districts of Alberta and Assiniboia, as reported by lessees of ranches and computed from information derived by this Department from other sources, is as follows:—

Cattle .....	121,116
Horses.....	16,463
Sheep .....	61,491
	<u>      </u>

The Department of Agriculture, however, reports that according to the general census of 1890 the number of head of stock in the said districts is:—

Cattle ....	215,078
Horses.....	55,419
Sheep .....	60,433
	<u>      </u>

The same report shows that the number of head of stock in the District of Saskatchewan is as follows:—

Cattle .....	16,144
Horses.....	5,220
Sheep .....	4,487
	<u>      </u>

This Department, of course, has no machinery for ascertaining the facts in relation to animals upon homesteads and privately owned lands, and the information obtained has relation chiefly to the lands held under lease from the Government for grazing purposes.

#### TIMBER.

In view of the fact that large tracts of timbered lands had been damaged by fire, rendering the timber thereon valueless unless it were utilized within a few years, it was considered that if the royalty on lumber produced from this class of timber were reduced it would encourage the mill-owners to first use the burnt timber, and thus preserve the green. The Governor General in Council, by an Order dated the 27th of June, 1891, reduced the royalty from five per cent, the rate prescribed by the regulations, to two and one-half per cent. Since the change came into force it is noticed that the object desired has been attained, as the greater portion of the lumber now being sold is manufactured from timber injured by fire.

The provision in the regulations for the erection of saw-mills has been modified by an Order in Council of the 20th of January, 1892. Instead of a licensee having to erect a saw-mill within a year from a date to be fixed in the license, he is now not required to construct a saw-mill until he is notified by the Department of the Interior to do so, and he is then given one year from the date of notification to construct the mill and begin to operate it. The provision for the erection of a saw-mill within a period specified in the license was inserted in order to promote the establishment of mills for the convenience of settlers who were removed from the railways and other means of supplying themselves with lumber, and at a time when timber berths were granted without competition. The result has been the establishment of a very considerable number of mills, and every facility is now afforded for the purchase of manufactured lumber in



almost every settlement in Manitoba, the North-West Territories, and within the railway belt in British Columbia, at a reasonable price. Not only had all local requirements been provided for, but the export trade was found to be in such a condition that to compel the production of sawn lumber in increased quantities might have produced very undesirable consequences.

#### MINERALS OTHER THAN COAL.

Under the arrangement between the Dominion and Provincial Governments that all minerals, with the exception of coal, on Dominion lands in the Province of British Columbia, are to be administered under the mining laws of the Province, 136 claims have been recorded with the Provincial Government, and three locations have been sold through that Government.

The provisions of the regulations for the disposal of Dominion lands containing minerals other than coal, having been found inapplicable to the disposal of petroleum locations, and operating to prevent their development, the Governor General in Council by an Order dated the 25th of August, 1891, rescinded the clauses of the regulations which applied to petroleum lands, save and except as to locations for which entries had been made.

#### OPERATIONS OF THE TOPOGRAPHICAL SURVEYS BRANCH.

Owing to the late sitting of the last session of Parliament and delays arising from it, only a few survey parties were sent out; the unexpended balance of the appropriation being now available will make it possible to commence next season's surveys early in the spring and to work more economically than usual.

#### TOPOGRAPHICAL SURVEYS.

The triangulation of the railway belt was continued under the direction of Mr. Drewry, and has now nearly reached the summit of the Selkirks. Another season will carry it beyond the Columbia River at Revelstoke. In the prosecution of this work Mr. Drewry and his assistants had to visit an entirely unknown country between the Columbia River and the summit of the Selkirks. The preliminary map based on their explorations will prove most useful at the present time.

In addition to his regular work, Mr. Drewry surveyed the road from Canmore to the boundary of the Rocky Mountains Park.

Mr. McArthur continued the topographical survey, covering some 500 square miles. His operations extended over the Palliser Range from the Devil's Head Mountain to the headwaters of the Red Deer River, and also south of the Simpson Pass, along the continental divide. He carried his survey on both sides of the railway from Castle Mountain west to the summit of the Rocky Mountains.

We have now eight sheets of this survey published, and expect to have ten more ready for publication at the end of the winter.

#### SUBDIVISION SURVEYS.

Two subdivision survey contracts were given out, one north of Prince Albert to Mr. J. L. Reid, D.L.S., and the other one south-east of Lake Dauphin, to Mr. A. F. Martin, D.L.S. In both cases the surveys were urgently needed, the lands being already settled upon.

In British Columbia Mr. Driscoll extended the subdivision surveys of New Westminster district. His progress was slow, but this was to be expected on account of the character of the country and the distances apart of the surveys which had to be attended to. The same conditions prevailed to some extent in Kamloops district, where Mr. John Vicars was at work subdividing the lands in the Spallumcheen Valley, and at other places.

#### SETTLEMENT SURVEYS COMPLETED TO DATE.

Hereunder will be found the usual table of subdivision or settlement survey work completed each year since the commencement of the surveys, with the results of last season's operations added :—

	Acres.	No. of Farms of 160 acres each.
Previous to June, 1873.....	4,792,292	29,952
In 1874.....	4,237,864	26,487
1875.....	665,000	4,156
1876.....	420,507	2,628
1877.....	231,691	1,448
1878.....	306,936	1,918
1879.....	1,130,482	7,066
1880.....	4,472,000	27,950
1881.....	8,147,000	50,919
1882.....	9,460,000	59,125
1883.....	27,000,000	168,750
1884.....	6,400,000	40,000
1885.....	391,680	2,448
1886.....	1,379,010	8,620
1887.....	643,710	4,023
1888.....	1,131,840	7,074
1889.....	516,969	3,231
1890.....	817,075	5,106
1891.....	76,560	476
	<u>77,220,607</u>	<u>451,379</u>

#### EXPLORATORY SURVEYS.

Mr. Wm. Ogilvie explored the country between the Liard and Peace Rivers on the east side of the Rocky Mountains. His first object was to reach the upper part of the Liard River, which he did by going overland to Edmonton and Athabasca Landing, thence down the Athabasca, Great Slave and Mackenzie Rivers to Fort Simpson, and thence up the Liard and the East Branch of the Nelson River. Between the Nelson River and Fort St. John the journey of about 140 miles was overland, the return being effected by Peace River, Lesser Slave Lake and River, and Athabasca River to the landing. The route travelled over involved about 1,800 miles in canoes, and about 600 on foot.

Observations to determine the latitude and longitude of all the principal points visited were taken, and as often in the intervals as the weather would permit. Much valuable information concerning the navigability of the Mackenzie River, the location and depths of all shallows and rapids, reliable data of the delta and estuary, and interesting facts relative to the water system and country around the east end of Great Slave Lake, were obtained.

The object of the expedition was to examine that part of the country between the Peace and Liard Rivers in the vicinity of the 120° meridian west of Greenwich, and obtain as much information as possible concerning it. This involved a journey of upwards of 250 miles through country of which very little was heretofore known. About two-thirds of this journey was accomplished in the canoe, the remainder across country on foot. Nearly the whole distance is thickly wooded, and in many places would yield much excellent lumber, which will in due time be serviceable. Unfortunately the water system on which it is situated flows to the Arctic Ocean, which practically shuts it out of existing markets.

The general character of the soil is fair, much of it good; there are, however, many extensive swamps covered with a deep growth of moss and small timber, which detract from the value of the country generally. Mr. Ogilvie believes that most of these can, whenever it is found necessary, be drained, and when this is accomplished, it is probable they will, as has been the case elsewhere, prove to be as good if not better than the rest of the country.

Climatic conditions aside, the general character of this tract resembles very much the country along the Athabasca and lower Peace Rivers. Mr. Ogilvie passed through it at a time of the year (October) when a simple record of temperatures would not be a reliable indication of its suitability for agricultural purposes; but judging from the flora he is of the opinion that the conditions are just as favourable as in a similar latitude on the Athabasca and upper Mackenzie, from which it will be seen the agricultural possibilities are greater than would be supposed taking the latitude into consideration, though not favourable enough to warrant advice to go beyond the millions of acres of fine agricultural land already surveyed and settle in this region.

Geological specimens were collected, but unfortunately owing to want of transport nearly all of them had to be left on the bank of the Nelson River in latitude 57° 31'. Some thin seams of lignite were seen at many points along the route, and a few specimens of that mineral brought out. Some clay-iron stone was also found.

Many photographs were taken of places and things of interest, but most of them had to be left behind too. At most of the posts visited all possible available data concerning the weather and crops for many years back were collected. Specimens of grains were brought out from the Peace River district, and the adaptability of that district for agricultural purposes will be pretty fully discussed in Mr. Ogilvie's report. Information was collected regarding the existence and extent of economic minerals outside the immediate line of travel; and the returns of the survey will enable us to fill up and correct upon our maps the geographical features of that district to a very large extent.

Personally a good deal of hardship and privation was suffered by the party, much more than on any other exploration which Mr. Ogilvie has hitherto conducted for the Department. As it was impossible to have his report ready in time to include it in this volume, it will appear in monograph form, and the outline of its contents which I am



able to give here will, I trust, serve to increase and not to diminish the interest which the public are likely to take in Mr. Ogilvie's latest work.

#### AMBER DEPOSITS ON CEDAR LAKE.

During the summer of 1890, an application was received from Messrs. Roderick Macfarlane and Cornwallis King, residents of the North-West, for permission to explore the shores and bed of Cedar Lake, on the Saskatchewan River, for amber, and what they represented to be specimens of that deposit found by them within the territory included in their application were submitted to the Department. Similar specimens had been shown by the discoverers to Mr. J. B. Tyrrell, of the Geological Survey, about the time the application referred to was made, and Mr. Tyrrell duly reported the fact to the head of the Department, with an estimate of the extent of the deposit. Mr. Otto J. Klotz, one of the most experienced surveyors in the employment of the Department, was detailed during the past season to visit the district, sub-divide the shores of the lake into mining locations, and report upon the question which had already been dealt with by Mr. Tyrrell. It is, however, impossible from the surveys made by Mr. Tyrrell and Mr. Klotz to give even approximately the area of the amber deposits, and this can only be ascertained by further exploration of the land and the dredging of the bottom of the lake.

As to the economic value of this amber, Dr. Selwyn, the Director of the Geological Survey, says it is impossible to speak with any assurance at present, but Professor Harrington, of McGill University, Montreal, is making a careful examination of its composition and properties, and has already published a preliminary paper on it in the *American Journal of Science*. By referring to this paper I find that Professor Harrington calls the so-called amber, resin, and states that some of the larger pieces might perhaps be employed for ornamental purposes, beads, &c., and possibly the material might be utilized by the varnish makers. Mr. Macfarlane has also filed letters from persons in the United States who are dealers in amber, to whom he sent samples, and they all agree that it cannot be used for pipe-stems, but may be used in the manufacture of amber varnish, and one of the firms stated that as no amber varnish is made in the United States there would be no market there.

It would, therefore, appear from the evidence before the Department that the article so far found is not of great value; upon further exploration and dredging, however, amber of a more remunerative nature might be discovered. This can only be done by incurring a large expenditure in procuring the necessary machinery for dredging, and for separating the amber from the extraneous material which the dredge will bring up with it. Even if such a quality of amber were found as would be marketable, it is a question, when the long distance Cedar Lake is from any place where it could be disposed of is taken into consideration, what profit would accrue to those who undertake to develop the deposit.

Messrs. Macfarlane and King, who duly proved that they were the original discoverers, were permitted to acquire a location of double the ordinary size, and the remainder of the tract will be put up to public competition.

#### LITHOGRAPHIC OFFICE.

This office was organized in 1882 for printing the plans of surveyed townships which had to be supplied to the land agents and to the different offices of the Depart-

ment, and also for sale to the Hudson Bay Company, to the Canadian Pacific Railway Company and to the public. They were previously printed outside by photo-lithography, but although the number of plans required at the same time was comparatively small, the printing was several months behind. It was quite clear that the process was inadequate to meet the requirements of the vast surveys then in contemplation. A small lithographic office with a few hand presses was therefore organized and fully answered the purpose; it has proved a great convenience in many other ways, supplying copies not only of all township plans, but also of maps, blank forms, circulars, &c.

The reduction in the surveys made last year has caused a corresponding decrease in the amount of work required from the lithographers. For keeping them fully employed I have been authorized by you to enter into arrangements with the Queen's Printer for executing the portions of his lithographic work which our equipment will permit us to undertake.

#### THE WHEAT CROP.

The system of crop and weather bulletins commenced two years ago has been the means of furnishing the Department with valuable information as to the growth and yield of the various crops. I have thought it desirable, however, to depend more upon the statistics published by the Government of Manitoba in arriving at an estimate of the season's product. The provincial bulletin shows the yield of wheat in Manitoba to be over 23,000,000 bushels, and from such sources as are available I learn that the wheat crop of the Territories will aggregate not less than 7,000,000 bushels. Assuming that there will be 22,000,000 bushels for export, and that the average market price will be about 55 cents per bushel (which estimates I believe to be well on the safe side), and assuming the number of farmers in Manitoba and the Territories to be 22,000, this would give to each farmer on the average \$550 in cash for wheat alone. In addition to this the farmer has his crops of barley and oats, potatoes, &c., as well as cattle, horses and other live stock, the value of which I have no means of ascertaining. In Manitoba, it may be mentioned, the total yield of oats was 14,762,605 bushels, of barley 3,197,876 bushels, and of potatoes 2,291,982 bushels. It is certain that the agricultural interest in the North-West is in a highly flourishing condition, and that the inducements to settlers to go there and take up land were never so strong at any time or in any country.

It is to be regretted that there are no means of knowing the amount expended by the farmers in recent years in improving their dwelling houses and farm buildings and otherwise increasing the value of their properties, and in building churches and schools, because I am convinced that the figures would show a higher state of comfort and advancement than people living elsewhere imagine.

#### ROCKY MOUNTAINS PARK.

Mr. Stewart reports that the work on the roads was continued last season, that on Buffalo Avenue being completed, and the road continued around Tunnel Mountain and on to the "Hoodoos" about three miles.

Work was also done on Sundance Avenue, a branch road made from Anthracite to the "Hoodoos," and one partially made connecting with Buffalo Avenue.

A good sidewalk of slag and cinders, 2,400 feet long and 6 feet wide, was also constructed from the Canadian Pacific Railway station to the village.



The superintendent reports that a quantity of dead timber was disposed of for various purposes, the removal of which will be greatly to the advantage of the park. A considerable revenue was also derived from the issue of a permit to cut ties within the reservation.

The park was tolerably free from fires during last season, only one of any consequence having occurred, and it is confidently hoped that the gradual removal of the dead wood and rubbish, and the construction of additional fire breaks, will minimize the danger from that source.

In accordance with your instructions, the museum has been fitted up for the reception of geological, botanical and natural history specimens. Professor Macoun spent several months last summer collecting specimens in the park, which, when placed in the museum, will no doubt prove a great attraction to visitors.

The weather being favourable, an excellent hay crop was gathered in the park meadows.

The record of the meteorological observations taken by Mr. McLeod is appended to the superintendent's report. You will observe, however, that it only comprises the readings of the thermometer and the general state of the weather, and it is, I think, advisable that the range of the observations should be extended, in view of the natural advantages of the park for this purpose and its importance as a health resort.

The past season shows a very satisfactory increase in the number of visitors, the increase at the Canadian Pacific Railway Hotel being 822, at the Sanitarium 1,170, and at the Cave and Basin 1,385.

The total number of visitors for the year was 7,250, and there is no doubt that the number will continue to increase as the reputation of the park spreads, and its natural beauties are made more accessible by opening fresh drives and bridle paths, and by other improvements from time to time.

#### NORTH-WEST HALF-BREED CLAIMS.

By an Order in Council of the 30th March, 1885, Commissioners were appointed to enumerate the half-breeds resident in the North-West Territories, outside of the limits of Manitoba, previous to the 15th day of July, 1870, and to report from time to time to the Minister of the Interior the persons who were entitled to be dealt with under sub-clause "f" of Clause 81 of the Dominion Lands Act, 1883 (49 Victoria, Chapter 54, Sub-clause "f" of Clause 90, R.S.C.), and also the extent to which they were entitled. The gentlemen composing the Commission were Mr. Street, Q.C., London, Ontario (now Mr. Justice Street of the Queen's Bench Division of the High Court of Justice of Ontario), Chairman; Mr. Roger Goulet, Dominion Lands Surveyor, of St. Boniface, Manitoba; and Mr. Amedée E. Forget, of Regina, Clerk of the North-West Council (now Assistant Indian Commissioner for the North-West Territories.)

The Commission held sittings at all the principal half-breed settlements throughout the Territories, and investigated and finally disposed of 1,815 claims presented to them.

By a further Order in Council of the 1st March, 1886, Mr. Roger Goulet, who was a member of the Commission above referred to, was appointed sole Commissioner to investigate and report upon the claims of such persons as were unable to appear before the Commission the previous year, residing at Lac Biche and at other points in the portion of the North-West Territories ceded by the Indians under treaties; and he was also empowered by an Order of the 19th April, 1886, to deal at the same time with the



claims of "original white settlers" who went to any part of the North-West Territories, the Indian title in which has been extinguished, between the years 1813 and 1835, both inclusive, or the children of such persons, not being half-breeds, born and living on the 26th day of May, 1874. 1,414 claims were investigated and dealt with by Mr. Goulet during the summer and fall of 1886, and 256 claims in the months of January and February of 1887, the latter claims having been preferred by half-breeds residing at the several settlements on Lakes Manitoba and Winnipegosis; but owing to the season being so far advanced, after completing the investigation of claims at Prince Albert, Mr. Goulet was unable to visit a number of half-breed settlements on the Saskatchewan River and Lake Winnipeg, and in consequence the following season it was thought expedient that the work should be completed at as early a day as possible. With this object in view, Mr. Goulet was by Order in Council of the 9th May, 1887, appointed chairman of the Commission, and Mr. N. Omer Côté, formerly secretary, a member of the Commission, to investigate such claims and the claims preferred by "original white settlers." 565 claims were received and dealt with by them at the several places they visited during that season, most of which (as were those dealt with the previous year) were preferred by half-breeds who were theretofore members of bands of Indians under treaty, and who as such were in receipt of Indian annuities and of other grants to Indians.

Upon the completion at Montreal Lake, in the month of February, 1889, of the necessary negotiations which Lieutenant Colonel Irvine and Mr. Goulet were authorized by Order in Council of the 29th November, 1888, to make with the Green Lake Indians for the surrender by them of a certain tract of land, Mr. Goulet, under the authority of an Order in Council of the 14th December, 1888, received and disposed of 56 applications to share in the half-breed grant of scrip or land; and, in addition to the above claims, 669 claims have also been received by the Commissioner and the Agents of Dominion Lands, which, upon the report of the former in each case, have been disposed of by the Department, under the authority of the Order in Council of the 14th June, 1889, making in all 4,775 North-West half-breed claims which have been up to the present date investigated and finally disposed of.

#### MANITOBA SCHOOL LANDS.

It is provided by sub-clause 3 of clause 25 of the Dominion Lands Act that all moneys from time to time realized from the sale of School Lands shall be invested in securities of Canada to form a School Fund, and that the interest arising therefrom, after deducting the cost of management, shall be paid annually to the Government of the Province or Territory within which the land is situated.

The area of surveyed School Lands in Manitoba is about 897,000 acres, and the estimated area of those unsurveyed, allowing for water areas, is approximatively 1,000,000 acres, making a total of about 1,897,000 acres. Up to the 31st December, 1891, 21,717 acres of surveyed lands had been sold, the sum of the sales being \$158,620, or nearly \$7.30 per acre.

In addition to this, the sale of lots in the subdivision of the south half of School Section 29, Township 13, Range 19 West of the 1st Meridian, at Rapid City, amounted to \$2,598, bringing the total sum up to \$161,218.

The Dominion Lands Act provides that at least one-fifth of the purchase money of School Lands shall be paid in cash at the time of the auction sale, and the balance in four equal successive annual instalments, with interest at the rate of 6 per cent per annum on the balances remaining unpaid from time to time.

The instalments on account of these sales received up to the 31st December, 1891, amounted to \$150,777.76, leaving at that date \$22,174.92 of principal still outstanding. The bulk of this latter sum is made up of instalments which fell due in January of this year, and most of it has since been paid.

The Fund has also been duly credited with the revenue derived from the hay, timber and stone taken from School Lands in the Province under proper authority, the amount received on this account being \$10,408.33.

The whole amount received on Manitoba School Lands account up to the 31st December, 1891, was \$166,889.43.

On the other side of the account, the Fund has been charged with the sum of \$30,000 with interest, which sum was advanced to the Province on the security of its School Land under the authority of the Act 41 Victoria, chapter 13. This Act empowered the Governor in Council to advance to the Province for School purposes a sum not exceeding in the whole \$10,000 in each of the fiscal years 1878-79, 1879-80 and 1880-81. For each of the fiscal years 1878-79 and 1879-80 the sum of \$10,000 was advanced to the Province accordingly; no advance was made during 1880-81; but by authority of an Order in Council dated the 1st of January, 1884, the sum authorized for 1880-81 was credited to the account of the Province for the fiscal year 1883-84.

It was further provided by the Act 41 Vic., chap. 13, that the advances thereby authorized should be recouped to the Government from the sales of School Lands in the Province, and in the meantime they should bear interest at 5 per cent per annum. This rate was allowed by the Minister of Finance, in the adjustment of the account, on all amounts from time to time credited to the Fund, so long as the balance was against the Province. When, however, the balance became a credit one, the interest from that date, the 3rd January, 1889, was computed at the rate allowed for investments in the Government Savings Bank, namely, 4 per cent, from the 3rd of January, 1889, to the 1st of October, 1889, and after that date, 3½ per cent.

The Fund has been charged with the expenses incurred in connection with the auction sales of lands from which the amount at the credit of the Fund has been derived, such expenses consisting of advertising, printing, auctioneers' fees, &c., and valuing the lands, the total amount thus charged up to the 1st July, 1890, being \$6,090.01. This is the whole sum charged in connection with the administration of the School Lands of Manitoba from the acquisition of the country by Canada up to the 1st July last, except for cost of management at headquarters. The mode of computing the sum to be charged to cover the "cost of management" at headquarters was a subject of discussion between yourself, the Deputy Minister of Finance, and me, and it was ultimately decided that for the present the fairest way would be to charge the Manitoba School Lands Fund with the sum of \$5,895.43, being one-half of the salary of the clerk in charge of the School Lands business at Ottawa, from the 22nd of January, 1880, the date of his appointment to that official duty, up to the close of the period covered by the account, the other half to be made a charge against the School Fund of the North-West Territories.

The account on the 31st December, 1891, according to this arrangement, stood as follows :—

MANITOBA School Lands.

CR.	\$	cts.	
Sales from commencement to 30th June, 1891.....	150,777	76	
Timber dues, hay, &c., to 31st December, 1891.....	10,408	33	
Interest to 30th June, 1891.....	5,703	34	166,889 43
DR.			
Cost of management at Ottawa.....	6,945	43	
Expenses, being examinations, valuations, auctioneers' fees, printing, advertising, &c.....	8,149	77	
Advance made to Province under 41 Vic., chap. 13.....	30,000	00	
Interest to 30th June, 1891.....	13,561	94	58,657 14
			108,232 29

SCHOOL LANDS in the North-West Territories.

CR.	\$	cts.	
Sales from commencement to 31st December, 1891—			
Alberta.....	46,620	49	
Assiniboia.....	4,199	04	
Saskatchewan.....	169	10	
Timber, hay, &c.....	3,230	71	
Interest to 30th June, 1891.....	2,437	30	56,656 64
DR.			
Cost of management at Ottawa.....	6,945	43	
Advertising, &c.....	303	46	
Interest to 30th June, 1891.....	417	89	7,666 78
			48,989 86

You will observe that the bulk of the sum charged against the Fund is made up of the \$30,000 advanced to the Province and the interest thereon, and that the \$15,095.20, charged for cost of management and expenses, covers a period of over 11 years, which I respectfully submit shows the management to have been most economical.

On the 20th July, 1891, a statement of the account was submitted to and approved by His Excellency the Governor General in Council, and the Government of Manitoba was furnished with a copy of it. At the same time, in conformity with the provisions of sub-clause 3 of clause 25 of the Dominion Lands Act, His Excellency authorized the payment to the Government of Manitoba for the purposes of the educational endowment of the interest accrued from the 3rd. January, 1889, when the balance became a credit one, to the 30th June, 1890. Since that time a balance of the account has been struck on the 30th June and the 31st December in each year, and the moneys derived from time to time from sales of the land in the Province have been invested in securities of Canada, as directed by the Dominion Lands Act, and the interest paid half-yearly to the Province on the credit balances, at the rate paid to depositors in the Government Savings Bank.

During the year the work of inspecting and valuing lands for which application had been made, or for which there seemed likely to be a demand, was proceeded with—



The work of inspection was commenced in May and continued until December. The lists of lands for sale were prepared from the inspectors' reports, no lot being included in the list which was valued at less than \$5 per acre, and the area offered for sale comprising in round numbers 250,000 acres.

As some of the lands had been inspected in 1889, and the value of real estate in the Province had increased since that date, it was decided, with a view of guarding against any possible sacrifice of the property, that, in addition to the valuation made by the inspectors, an independent valuation should be obtained from some competent appraiser, and this was accordingly done, with the result that the upset prices were in many instances considerably increased.

The sales were held in January and February of this year, and though the dates are subsequent to the period to which the Departmental Report refers, it has been deemed advisable, in view of the importance which attaches to these sales as an index of the prosperity and progress of Manitoba, to give a statement of their results, and with this object I have held back my report until the receipt of the returns of the same.

These have now been received and are embodied in the following :—

STATEMENT showing the results of School Lands sales held at the undermentioned places in Manitoba during the months of January and February, 1892.

Place of Sale.	Date.	Number of Acres.	Amount realized.	Cash.	Rate per acre.
	1892.		\$ cts.	\$ cts.	\$ cts.
Morden .....	Jan. 13..	11,973 40	106,962 77	21,399 80	8 93
Pilot Mound.....	do 15..	1,585 00	9,624 00	1,931 20	6 07
Glenboro'.....	do 22..	5,255 24	48,997 66	9,799 32	9 32
Portage la Prairie.....	do 27..	1,282 00	10,450 00	2,098 00	8 15
Minnedosa.....	do 29..	4,960 00	38,304 00	7,660 80	7 72
Brandon.....	Feb. 3..	15,675 07	127,105 93	25,426 85	8 11
Winnipeg.....	do 5..	6,382 88	35,374 40	7,422 88	5 54
Deloraine.....	do 10..	5,917 00	44,699 00	8,939 80	7 55
		53,030 59	421,517 76	84,678 65	7 95

From the foregoing statement it will be seen that 53,030.59 acres realized \$421,517.76, or an average price of \$7.95 per acre, a most satisfactory price when the large area sold is taken into account. A number of quarter sections were sold at prices ranging from \$10 to \$15 per acre, one quarter section bringing \$25 per acre; while in the case of some of the small parcels of four or five acres, into which the N.  $\frac{1}{2}$  of Section 11, Township 10, Range 19 west, was divided, the price realized was even higher, ranging from \$20 to \$65 per acre.

MILEAGE OF RAILWAYS IN MANITOBA, THE NORTH-WEST TERRITORIES, AND  
BRITISH COLUMBIA.

The following table, revised to date, will be found of some interest :—

	Constructed previous to 1891.	Total.
<i>Manitoba.</i>		
Miles.		
Main Line Canadian Pacific Railway.....	313	
Branch Lines, Canadian Pacific Railway.....	523·1	
Northern Pacific and Manitoba Railway.....	265·6	
Manitoba North-Western Railway.....	250	
Hudson's Bay Railway.....	40	
Great North-West Central Railway.....	50	
	1,441·7	
<i>North-West Territories.</i>		
Main Line Canadian Pacific Railway.....	752	
Qu'Appelle, Long Lake and Saskatchewan Railway.....	246·8	
Alberta Railway and North-West Coal and Navigation Company.....	173	
Calgary and Edmonton Railway—completed.....	93	
do (under construction to Edmonton).....	97	
	1,361·8	
<i>British Columbia.</i>		
Main Line, Canadian Pacific Railway.....	519	
New Westminster Branch, Canadian Pacific Railway.....	9·2	
Vancouver to Coal Harbour do.....	1·2	
Mission Branch do.....	11	
Columbia and Kootenay Railway do.....	28·5	
Shuswap and Okanagan Railway (under construction).....	50	
	618·9	
MILEAGE OF BRANCH LINES.		3,422·4
<i>Manitoba.</i>		
Souris Branch—Kenmay to Hartney.....	34·7	
Under construction from Hartney south-west and nearly completed.....	37·8	
Glenboro' Extension.....	27·5	
	100·0	
<i>North-West Territories.</i>		
Qu'Appelle, Long Lake and Saskatchewan Railway.....	246·8	
Calgary and Edmonton.....	93	
	339·8	
<i>British Columbia.</i>		
Mission Branch.....	11	
Columbia and Kootenay Railway (C.P.R.).....	28·5	
Shuswap and Okanagan Railway (under construction).....	50	
	89·5	
		529·3
Total.....		3,951·7
MILEAGE CONSTRUCTED IN 1891.		
<i>Manitoba.</i>		
Souris Branch—Hartney to Province line near Gainsboro', completed in 1891... ..	46·8	
Deloraine to Napinka (under construction).....	18·	
<i>North-West Territories.</i>		
Souris Branch—Province line near Gainsboro' to Oxbow.....	33·5	
Oxbow to Coal Fields (under construction).....	152·8	
Calgary and Edmonton.....	40·0	
<i>British Columbia.</i>		
Shuswap and Okanagan Railway (under construction).....	50·	
		341·1
Total constructed.....		4,292·8

## CONSTRUCTION CONTEMPLATED DURING YEAR 1892.

<i>Manitoba.</i>		Miles.
From point near Souris westward to Pipestone Valley. ....		30
Completion of Deloraine Branch. ....		18
Extension of Glenboro' Branch. ....		18
Completion of extension, Oxbow to Coal Fields. ....		40
<i>North-West Territories.</i>		
Calgary and Edmonton Railway, to complete line to Old Man's River, near Fort Macleod. ....		56
<i>British Columbia.</i>		
Revelstoke to head of Arrow Lake, C.P.R. ....		25
Total. ....		187

A survey of a proposed extension of the Souris branch west and north-westerly to a connection with the main line at or near Regina or Moose Jaw is in progress, and construction will be commenced during 1892. The distance is about 140 miles.

The construction of a branch line through the Crow's Nest Pass is also contemplated, and the proposed line is now under survey.

## NORTH-WEST TERRITORIES.

Part III of this report relates to the Government of the North-West Territories.

His Honour Lieutenant Governor Royal refers to the abundant harvest of last season, which was saved in good condition, and to the increased acreage under cultivation, as well as to the number of settlers who have gone into the Territories during the year.

Mention is made of the recent completion of the Calgary and Edmonton Railway and the benefits which will accrue therefrom to settlers in the latter neighbourhood and to the country generally. The branch lines now being constructed between Calgary and Macleod and contemplated in the south-east of this District are also referred to, and the Canadian Pacific Railway Company is complimented on its enterprise in thus bringing the outlying portions of the Territories into communication with the markets of the world.

In pursuance of the Act passed during the last session of the Parliament of Canada, whereby control of certain specified portions of the Territorial Funds and Appropriations may be vested in the Legislative Assembly of the Territories, an Order of the Governor General in Council was passed on the 8th December last giving the Lieutenant Governor, by and with the advice of the Legislative Assembly or any Committee thereof, control of certain moneys so appropriated for the fiscal year 1891-92. For the more satisfactory discharge of these new duties it was deemed advisable to appoint a Committee consisting of four members of the Assembly to aid and advise the Lieutenant Governor, and an Ordinance providing for such appointment was passed on the 24th December. The Committee subsequently selected consists of Messrs. F. W. G. Haultain, member for Macleod; James Clinkskill, member for Battleford; J. R. Neff, member for Moosomin; and Thomas Tweed, member for Medicine Hat.

Mr. Clinkskill has since resigned, and has been replaced by Mr. H. S. Cayley, of Calgary.



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With regard to the repealing of the liquor clauses of the North-West Territories Act, His Honour states as follows :—

“ In response to repeated memorials from the Territorial Legislature, the Parliament of Canada last session clothed the Legislative Assembly with power to legislate with respect to intoxicating liquors, an exception being made in regard to the portions of the Territories not represented in the Legislature.

“ An Ordinance was accordingly passed by the Legislature in the session just closed providing for the sale of intoxicating liquors and the issue of licenses therefor, which will come into operation on 1st May, 1892.

“ By this Ordinance the liquor clauses of the North-West Territories Act have been repealed, and the permit system so long in vogue been abolished.

“ It is the earnest hope of all who have had part in dealing with this grave question that the action thus taken by the Legislature will tend to promote and secure the high reputation for order and morality now possessed by the people of the Territories.”

There has been an increase in the Territories during the year of 15 schools, 32 teachers, and 1,079 pupils, while applications are pending for the formation of over twenty new school districts.

#### DISTRICT OF KEEWATIN.

Part IV of this Report is a brief reference to the state of affairs in the District of Keewatin by His Honour Lieutenant Governor Schultz.

The Act regarding the importation of intoxicants into the district has been faithfully observed, and no serious crime or infectious disease among the Indians—with the exception of an outbreak of La Grippe—has been reported.

There has been an increase during the year of the food animals of the district, while the fresh-water fisheries were on the whole good, and as a consequence there has been less destitution than usual. In this connection, and with regard to the future food supply of non-treaty Indians, His Honour calls attention to reports made by him on the satisfactory experiments of growing wheat, oats, and vegetables in the districts of Oxford House and Norway House, and the more eastern and southern portions of Keewatin.

Reference is also made to the illegal operations of American whalers along the more northerly sea coast of the district.

I have the honour to be, Sir,

Your obedient servant,

A. M. BURGESS.



## No. 1.

## REPORT OF THE COMMISSIONER OF DOMINION LANDS.

OFFICE OF THE DOMINION LANDS BOARD,

WINNIPEG, 1st November, 1891.

To the HON. EDGAR DEWDNEY,  
Minister of the Interior,  
Ottawa.

SIR.—I have the honour to submit my report for the year ending the 31st October, 1891, also the reports of Messrs. William Pearce, Superintendent of Mines, and J. M. Gordon, Inspector of Dominion Lands Agencies, in reference to their respective offices.

The appended statement shows the work performed in my office, so far as it can be presented in tabulated form.

You will observe that the volume of correspondence is apparently diminishing. The falling off in the number of letters received, as compared with last year, is due to the discontinuance of the practice on the part of the agencies of sending covering letters with applications for patent and other papers that are in themselves self-explanatory, and in acknowledging the receipt of instructions issued from this office.

Regarding applications for patent, I may explain that a considerable number are held in my office or have been returned to the agencies, not approved. In some cases I have been obliged to withhold my approval for the reason that the homestead duties prescribed by the Act have not been fully completed; in others because liens executed by settlers to whom advances were made under the Act of 1883 have not as yet been discharged; in others again where liens have been executed in favour of the Minister by the homesteaders who received advances of seed grain that have not as yet been repaid.

The number of reports received from the homestead inspectors now employed is less than the return of last year, but the time of the inspectors generally has been this year occupied more largely than heretofore in the somewhat difficult and tedious work of receiving evidence in support of applications for homestead patent. The charge imposed in cases where the inspector visits the homesteader is now \$5, instead of as formerly \$2.50. This charge covers the time and work of the inspector in taking not only the application of the settler himself but also the evidence of his two corroborating witnesses. It is not considered that the charge is excessive; in fact the establishment of the inspection service has proved a very decided boon to the settlers. Although originally employed for the purpose of facilitating the cancellation of homestead entries in cases where the entrants were not fulfilling the requirements of the law, it was very wisely decided to authorize homestead inspectors to receive applications for patent. At first no charge was made, but the demand upon the time of the inspectors became so great, as the convenience of the new method became appreciated by the settlers, that it was found necessary both to add to the number of the inspectors and to charge a fee, partly to defray the expense of this branch of the service. The \$5 fee, I may add, is very rarely as much as the settler would require to pay were it necessary for him to proceed with his witnesses to make personal application at the District Land Office. Should he, however, prefer to take his witnesses to the agent's office he is at liberty to do so, as it is purely optional with him whether he avails himself of the inspector's services or not.



The number of homestead entries granted in the departmental year now closed is, as shown by Mr. Gordon's report, 3,525, being 570 in excess of the number granted in the year ending the 31st October, 1890. This is a very satisfactory showing. The increase is in a small measure due to the fact that by permission of the Department settlers entitled to second homesteads are permitted to enter for their own pre-emptions. I find recorded 185 entries of this nature. It is also and largely due to the efforts of the Department of Agriculture in attracting settlers to the country. The completion of the railway to Prince Albert and to Edmonton, as well as the extension of the Manitoba and North-Western Railway, have led to considerable settlement along these lines respectively. The returns indicate largely increased settlement in the Edmonton, Birtle, Little Saskatchewan (including Lake Dauphin), and Touchwood Districts.

#### CROPS.

Bulletin No. 31 issued by the Provincial Department of Agriculture and Immigration, states that 1,324,841 acres have been under crop in Manitoba during the past season, the total yield from which has been approximately: Wheat, 23,191,599 bushels; oats, 14,762,604 bushels; barley, 3,197,876; potatoes, 2,291,982 bushels. The probable yield in the North-West Territories will increase the product for Manitoba and the Territories by probably six or seven million bushels of wheat, five or six million bushels of oats, one or two million bushels of barley, and say, half a million bushels of potatoes. The estimate, however, as to the product of the Territories is not based on any official returns.

The quality of the wheat, oats and barley raised in Manitoba is satisfactory. It is represented that the wheat grown in the Territories is almost entirely free from the effect of frost or blemish of any sort, and that nearly the whole of it will grade No. 1 hard.

The rainfall in the months of June, July and August, respectively, in Manitoba was 5.57, 2.95 and 2.59 inches. The abundant moisture and other favourable climatic conditions account for the very bountiful crop, the yield in all grains being above the average.

The Manitoba crop report to which I have referred states that 3,795,193 pounds of binding twine were consumed in harvest operations. The report draws particular attention to the absence of suitable help during harvest. It states that in almost every township there has been an absence of farm labourers, and that the inconvenience and loss arising from this cause have been very great. "Twice as many," it says, "as those who came into the province last season would have found several months' work from the beginning of harvest."

The excursion rates granted by the Canadian Pacific Railway Company to agricultural labourers led to a large number of persons coming here to assist in the harvest operations. I am of opinion that these excursions afford an excellent opportunity for all persons contemplating settlement, whether residing at present in Eastern Canada or the Eastern States of the Union, to gain a useful knowledge of the North-West in the most economical and advantageous way.

#### *Fuel Supply.*

The development of the Souris Coal District will no doubt afford cheap fuel to the whole of Manitoba. The west, excepting the Prince Albert and Battleford Districts, is rich in coal deposits. In both the Prince Albert and Battleford Districts there is at present a very large supply of timber. I dare say that ultimately the settlers in these districts will obtain what coal they require at cheap rates by bringing it down the Saskatchewan River.

#### *School Lands.*

The work of examining and reporting upon these lands has been prosecuted during the season just closed by Messrs. George D. Bedford and H. Elliott, the

former having been engaged during the whole season, and the latter from the 17th of August only.

The number of reports received from these inspectors is 666.

*Immigration.*

As is shown by the statement incorporated in this report my office has disbursed \$10,187 for the Department of Agriculture for immigration purposes. The whole of this money has been expended in connection with the movement initiated by the Department of Agriculture, having in view the settlement in this country of farmers from the North and South Dakotas and Minnesota, who, it has been represented, are not fully satisfied with their present locations. Many of the people to whom I refer are Canadians. Some of them have been farming in Dakota for years with such unsatisfactory results that they are reported to have at last made up their minds to seek some new field. Several parties of prospectors have visited this country during the past two years, and this year a considerable number of settlers from the Dakotas have moved in with their families, outfits and live stock. I believe in all not less than 300 to 400 have either made homestead entry or purchased land upon which they propose to take up their permanent residence. It is anticipated that the immigration from the Dakotas next year will be very large. I am advised that the class of settlers is most satisfactory; they are generally possessed of considerable live stock, farming implements and general outfit, and are in an excellent position, from their knowledge of farming, to make a success in the locality in which they are now settled, chiefly along the line of the Manitoba and North-Western Railway, west of the province, and in the Edmonton District. Those of them who have been on their new locations for a sufficient length of time to enable them to form an opinion as to the probable result of their operations are, I believe, reporting most favourably to their friends in Dakota. The climatic conditions here are very similar to those to which they have been accustomed. The advantages which no doubt struck them most conspicuously are the abundance of timber and living water, hay and the excellent quality of the soil. I believe that the winter in Manitoba and North-West Territories is not so trying as in the treeless districts of Dakota.

Sales of land by railroad companies and other corporations having lands to dispose of are generally in excess of last year. I am advised that sales are now for the most part made to persons who are already in occupation of land and who desire to increase their farming operations, or to new comers who propose going into residence upon the land which they may thus obtain, preferring to do this rather than take up homestead lands less conveniently situated in relation to railway points.

I have the honour to be, Sir,

Your obedient servant,

H. H. SMITH,

*Commissioner.*

## STATEMENT of work, &amp;c., Office of the

Departmental year.	Letters received.	Letters sent.	Cancellation Land Board orders.			Applications for patent.		Reports received from home- stead inspectors.	Seed grain repayments.	
			Homesteads.	Pre-emptions.	Refused.	Approved.	Pending.		Relief mortgages of 1876.	Seed grain advances of 1886, 1887, 1888 and 1890.
1890-91	25,441	29,031	104	91	63	1,366	*300	3,593	\$ cts. 5,053 23	\$ cts. 5,045 99

\* Approximate.



## Commissioner of Dominion Lands.

Agencies trust account.				Receipts.		Letter of credit account.				Department Agriculture.		
Receipts.	No. of items.	Disbursements.	No. of cheques issued.	Fees <i>re</i> applications for Patents.	Maps, certificates, &c.	Home- stead in- spection service.	Special service.	Contingencies.	No. of cheques issued.	Disbursements.	No. of cheques issued.	Annual salaries.
\$ cts.		\$ cts.		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.		\$ cts.		\$ cts
20,990 09	1,070	20,339 57	964	2,782 00	214 75	6,555 81	4,089 21	1,591 81	293	10,187 18	204	20,122 27

## No. 2.

## REPORT OF THE SUPERINTENDENT OF MINES.

OFFICE OF THE SUPERINTENDENT OF MINES,  
CALGARY, 1st December, 1891.

SIR,—I have the honour to submit, for the information of the Honourable the Minister of the Interior, my report on the work of my office for the twelve months ending the 31st October, 1891.

About the middle of November, 1890, I commenced the inspection of a portion of the land grant which the Manitoba and South-Western Railway claimed was not "fairly fit for settlement." I returned to Calgary on the completion of that work early in December.

On 18th, 19th and 20th December, I visited Canmore in connection with the location of a switch across the Government town plot, which gave access to the coal mine of the North-West Coal and Lumber Syndicate (Limited).

On the 28th December I left Calgary to take charge of the office of the Commissioner during his absence, and reached home again on 1st February.

From 9th to 18th March was occupied in visiting Winnipeg and also Lethbridge.

On 1st April I left for Ottawa, and reached home again on the 20th May.

From 29th May to 2nd June I was making an inspection of the country lying between the Porcupine Hills and the Rocky Mountains.

From 3rd to 8th June I was engaged in making some changes in the town plot survey at Canmore, also in inspecting the improvements made by the Canadian Pacific Railway Colonization Company at Queenstown, south of the Blackfoot reserve.

On the 9th June I went to Winnipeg to act for the Commissioner, and returned to Calgary on the 30th of the same month. During that time I spent two days at Selkirk, making surveys.

From 2nd to 15th July I was engaged in inspecting, with the view of placing a valuation on, the portions of school sections intersected by the Regina and Prince Albert Railway, and also a school section part of which will be required by the projected branch from Saskatoon to the Elbow of the North Saskatchewan.

Between the 18th and the 26th July I went as far as Albert cañon to investigate certain matters at various points between here and there.

During the period 9th to 16th August I visited Revelstoke, Kamloops, Enderby and Vernon, in connection with certain applications for land at the first point and with squatters' claims along the Spallumcheen River.

From 3rd September to 9th October I was visiting Lac Ste. Anne and Lac la Biche, taking evidence regarding land claims at both lakes. I also made some surveys at both points.

From 17th to 30th October I was making a trip through Southern Alberta in connection with petroleum claims and other matters.

Reports regarding the foregoing have been forwarded from time to time to the Commissioner at Winnipeg.

*Coal.*

The output of coal in the mines of the North-West last year was not so large as was anticipated.

At Lethbridge this has been owing to severe competition in the States. It would seem that the smelters there, whose managers desire to take this coal, do not consume it, because the proprietors of them are interested in coal mines themselves.

At Canmore and Anthracite W. H. McNeill & Co. (Limited) have taken possession, which they did in June, and are developing as rapidly as possible. At the former point they have put in a switch of 6,500 feet, and expect shortly to put out 100 tons a day there. The coal they are mining is claimed to be a steam coal of the highest quality as regards fixed carbon and freedom from clinker and other deleterious matter.

I give in more detail reports upon the different collieries which I inspected during the past year.

*Canmore Coal Mines.*

The Canadian Pacific Railway Company have lately completed the construction of a switch which leaves the one connecting their main line with the coal mine of the Canada North-West Coal and Lumber Syndicate (Limited) on the south-west bank of the Bow River, running down the river to a point on the N. W.  $\frac{1}{4}$  Sec. 29, being the mouth of the White Man's Pass. The switch in question is 6,500 feet in length. H. W. McNeill & Co. (Limited) have at this point driven a slope down a vein of coal 268 feet. At that distance they are driving in horizontal gangways and expect very shortly to be able to put out 100 tons of coal a day. This quantity will be increased if sufficient sale for the coal can be obtained. The seam in question is about 4 feet 6 inches in thickness. In the centre there is a core of about 6 inches of crushed material, which will be left in the mine. This crushed material is really of advantage in the vein, as it will cheapen the cost of mining very considerably. The coal appears to be highly bituminous and is pronounced to be very good steam coal. It is said the Canadian Pacific Railway Company think very highly of it for that purpose, and, should it prove as good as anticipated, will use it largely on their locomotives. McNeill & Co. have their hoisting apparatus in place, and probably by this time are shipping coal in considerable quantity. It is upwards of two weeks since I visited the location. Lying in close proximity to this seam are several other seams of various thickness which can be readily cross-cut by a tunnel from the foot of this slope, and by which coal can be brought to the surface. Some experiments in coking these coals have been made. The results are encouraging. Mr. McNeill states that so soon as he got the mine into good trim, probably early in the spring, he proposed erecting a coking oven, and if the coke proved favourable he would then go into it as extensively as the market for it would warrant. If the Calgary and Edmonton Railway's southern extension is constructed to connect with the American system of railways, and favourable freight rates can be obtained, he thinks an immense market for coking and anthracite coals can be secured in the United States. Immediately alongside of this slope there is a stream of water which comes out of the White Man's Pass. It flows winter and summer, with a considerable volume of water, through a narrow gulch, which can be cheaply and substantially dammed, giving a great head of water, and, the water being blanketed by ice, anchor ice, which is so troublesome during the winter, would be avoided. By this, electrical power, which seems to be coming into great favour as a motive power for mining machinery, can be produced at the minimum of cost, thus enabling the mining of coal at this point to be carried on at very low cost.

*Canada North-West Coal and Lumber Syndicate (Ltd.)*

Some time during last spring a Mr. Dickinson was placed in charge of this mine, Mr. Howe, his predecessor, having returned to England. Mr. Dickinson found the motive power for hoisting very much too weak. The result was considerable delay before the necessary machinery could be put into place. The motive power there seemed to be all that is necessary at present, both for hoisting coal and driving the ventilating fans. He has also made considerable changes in the track connecting the mine with the railway line. A coking oven was built by his predecessor, but it proved a failure. Mr. Dickinson, however, states that his company proposes building ovens in the spring which he thinks, the coal having been washed, will produce an excellent quality of coke. He further states that they propose



driving in a tunnel, which was commenced over a year ago, till they cross-cut the seam on which they are working. He has also changed the system of mining adopted by his predecessor, and will shortly be in a position to leave all his refuse in the mine, instead of hoisting it out on the dump, thereby effecting a very large saving in mining, while the quality of coal shipped will be greatly improved. The temptation at present is a little too strong to run in inferior with the superior coal. The vein is thick enough to make a good profitable one to work, even if half of it were left in the workings. The half that would be brought out then would be high class coal. They are getting out between 40 and 60 tons per day, having about 35 men employed.

*The H. W. McNeill Mine, Anthracite.*

Mr. McNeill took hold of this mine in June last. The late company had driven a slope down "No. 1" vein 382 feet from the surface, which he uses to furnish ventilation for his mining operations and also for hoisting up coal. This slope has a dip at the surface of 45 degrees, and after you go down something over 200 feet it changes to 56 degrees, continuing thus as far as they have gone with it. This company does not intend continuing working the seams worked by the late company, thinking there is too much slate in the coal for profitable mining, or rather there were others immediately to the south that could be more cheaply mined. From the outcroppings he anticipated striking what he calls his "A" seam at, I think, somewhere in the neighbourhood of 100 feet. He struck it at the estimated distance, thus showing that "A" and "No. 1" are parallel to each other. He counted on striking what he calls seam "B" at, I think, a distance of about 100 feet further. He has driven his tunnel nearly 200 feet and has not yet struck it, but, from the rock he is going through, he thinks that the stratification is changing, and he imagines "B" maintains its dip of about 45 degrees all the way down from the surface. He is not shoving work very hard on this tunnel, having only a small force at work, devoting his energies chiefly to getting into a position to mine coal in considerable quantity out of seam "A." He has been disappointed in turning out the coal he anticipated from two causes: First, delay in his plant for hoisting and ventilation reaching its destination; secondly, when he got that into position he thought that while he was getting his seams "A," "B" and "C" into such a position that coal could be mined readily and cheaply from them he could put out a considerable quantity of coal by robbing the late workings, which, he states he was informed, had not been previously done; but when he came to commence his robbing operations he found that this had been done by his predecessors. The result has been very disappointing to him, and also to many who would have liked to take his coal, at least for a test; but he will very shortly be in a position to supply large quantities. If nothing unforeseen occurs he thinks that in a year he can get this mine into such a shape that he can turn out 1,000 tons a day, if the market will warrant it. Seam "A," on which he is working, is about 10 feet in thickness. There is a core over 3 feet from the foot-wall which varies in thickness from 3 inches to a foot. The core is of slate. This core is followed by 6 feet of coal. Both the foot and hanging walls of this mine are smooth and strong, so that expense of propping will not be a material one. He has driven a gangway east of this seam about 300 feet and west about 200 feet. It is to be worked on the "breast and pillar" system—at least, he purposes taking out breasts 30 feet in width, leaving pillars 30 feet in width, working upon the upper or 6 feet portion of the seam, and then, as he comes back, he will rob and lift up this coal, throw back the slate and clean out the coal lying underneath. It will thus be seen that all his refuse will remain in the mine. His gangways are 8 feet by 10 feet; his air-way, 6 feet by 6 feet. When I was there, recently, there were two breasts completed ready for working—that is, the air circuits had been completed. The mine is ventilated by fans forcing the air into the mine. This seam, so far, has a very high percentage of fixed carbon and low percentage of moisture, this being the standard that has been decided upon for determining what is anthracite and what is not. The coal, which is A1, is however friable in handling, but not from

atmospheric exposure. The result would be, if it were put through a breaker at the mine and assorted for use, a large percentage of it would go into dust and be lost. The company purposes to obviate this by mining it in as large blocks as possible, shipping it to the various yards and having it broken and assorted there. The extra cost of breaking, necessarily by hand, at these yards will be more than many times met by the saving in waste; besides, probably 50 per cent of the coal consumed at various points can be used without any breaking, by teaching the people how to burn it. The output of this mine is about 50 tons per day. Everything seems in first-class order, and everyone who has met Mr. McNeill appears to be favourably impressed with him and his ability as a mine operator. He has been operating collieries for a great many years.

#### *Lethbridge Colliery.*

The output of this mine is not nearly so great as was anticipated. Several causes have been at work which have accounted for this. First, the Anaconda works in Montana shut down. These works consumed an immense quantity of coal, in the supplying of which the Lethbridge Company expected to obtain a share. The shutting down of the Anaconda works relieved the Oregon Short Line of a great deal of freight which they had formerly carried, throwing out of use a large number of coal and ore cars principally. The Rock Springs Mine, owned by the Union Pacific, which also owns the Oregon Short Line, then commenced shipping their slack, which had accumulated at their mine, to Butte, selling it to the smelters there at the same price per ton as they had formerly paid for freight on coal, thus reducing the consumption of ordinary coal at Butte probably 50 per cent. The interest which controls the Great Northern Railway and also the town of Great Falls through its smelters, owns what is known as the Sand Coulee Mine, and, although it has taken two tons of this coal to do the same work and produce the same results that one of the Galt has done, they have turned in this coal in such quantity and at such prices that the Galts cannot compete after paying duty. It is claimed that this coal has been delivered at the smelters at considerably less per ton than it costs to mine, the object being to kill off the Galt competition if possible. The Lethbridge Mine when working turned out about 600 tons per day, but until recently they have only been working some two, three and occasionally four days per week. It is reported, however, that they are now working full time, owing to a strike of the miners at Sand Coulee. At Lethbridge there is sufficient development work and shafts to enable the company in a very short time to put out 2,000 tons per day.

#### *Christie Mine.*

This mine has been worked by one Christie, and is situated on the N.W.  $\frac{1}{4}$  Sec. 10, Tp. 5, R. 1, W. 5th M. The mine lies at a considerable height, on a steep hill, or almost mountain side. The crest of the hill is probably 300 feet higher than the coal outcrop.

Mr. Christie has driven in a tunnel 8 feet wide, curving so that at about 40 feet in from the face of the hill he has curved it 90 degrees. He then continued it parallel to the face of the hill 275 feet in all. He has worked out three chambers about 15 feet square each. He says he purposes driving in a tunnel about 50 feet lower from the face of the hill and working at this seam by that means.

This seam, Mr. Christie states, varies from 8 to 12 feet in thickness, but so far there has not been work enough done to know what will be its thickness, nor yet its dip. He has not got down the vein more than 40 feet, and the general stratification of the district shows a dip of 45 to 60 degrees, which is more than he states, viz., one foot in eight, which is only some seven degrees dip. It is probable that just at the point of fracture the seam becomes flattened, and in working in from the face it will be found that the dip increases. The bottom  $2\frac{1}{2}$  feet of the seam is the best coal. It has in it considerable Peacock coal, the colour of which, however, is lost on very short exposure to the air. Above this there is a core of from two to six



inches, which probably contains considerable iron. I will send a sample of this to be assayed. Between this core and the roof there are several small cores of slate and sandstone, with no regularity in them, interjected through the coal. They vary from one to two inches in thickness. There is a roll both in the floor and the roof of this seam. There is considerable slicken-sides in the coal, which will cause considerable waste in handling. The coal is dull in colour. I asked Mr. Christie how it assayed in fixed carbon. He could not, or did not, tell me. He said that he did not remember the percentage, but it was considered high. He said, however, that they have assays of it in the Geological Department. Immediately above this seam, which is exposed for a considerable distance by a slide off the face of the rock, the crest of the hill seems considerably below the general line, as if there was a drop in the ridge over this exposed seam, which probably causes the seam to have the small dip which it has. The coal gives good satisfaction to those who have used it.

#### *Petroleum Development.*

Last month I visited the southern portion of Alberta to ascertain what was being done in petroleum development. I found only one concern at work, what is known as the Southern Alberta Land Development Co., Limited. Their ostensible capital, I think, is \$50,000. They claim to have spent about \$10,000. They have a 15-horse power engine and a 20-horse power boiler with derrick and rigging. These cost, delivered at Lethbridge, \$3,600. They have also in addition several teams and horses, three waggons, trucks, &c., blacksmith shop, and a couple of small houses for the men, pole stable and corral for their horses; buildings of all kinds very cheap. The first test was made on the S.W.  $\frac{1}{4}$  21-3-29 W. 4th M. They went down 250 feet from the surface, all the way through boulder drift, being in a valley of a stream locally known as Pine Creek. At that depth a very heavy flow of water was struck, which filled the pipe (which is about 6 inches diameter) to its capacity and rose several feet above the surface of the ground. This flow of water probably displaced the boulders at the bottom, the result being the jamming of the tube, so that they could get it neither up nor down. They pulled out what they could and moved their plant down to the N.W.  $\frac{1}{4}$  34-2-30 W. 4th M., and when I was there, on the 23rd October, 1891, they claimed to be down 190 feet. They were going through sandstone, but whether *in situ* or slide from the mountain side, as they are against the foot of the mountain and at a considerable elevation, it is impossible to decide. They had very little piping on hand, but said they expected more, and stated that the plant they had would enable them to go down 3,000 feet. Even if petroleum was not found at that depth I do not think that prospectors should conclude that it did not lie below that, as the elevation at this point is very considerable. It is reported that this company have ceased operations. Possibly financial reasons may be the cause of such cessation. What Mr. Grant intends doing, no one there seems to have any idea. There was, I was told, a small hand drill at work just doing the necessary assessment work to prevent the cancellation of many claims. I was informed I would come across these parties at work by the route I was taking, but I failed to see them. The value of such assessment work as regards development of a claim is *nil*.

#### *Smelters.*

The Revelstoke Smelter ran during the year for a short time. The Golden Smelter is ready for running and it is anticipated that next season there will be considerable ore for it, as a large amount of development work is being carried on this winter in regions tributary to it, and should that result prove what is confidently expected and which the workings show good ground for anticipating, there will no doubt be large quantities of ore obtainable at this point. In this connection, it may be mentioned that everything points in the near future to a great mineral boom along the Selkirks, extending from the Kootenay Lake to the Canadian Pacific Railway.

While on this subject I would respectfully suggest the advisability of the Government taking steps to attract the attention of mining men in the United States to the mineral resources of this country. I am very strongly of opinion that, were it



possible to present to them in a form they would take notice of, particularly of the richness of the North-West in minerals, and to bring before them the most important provisions of the Dominion Mining Regulations (which I have reason to believe have been much misrepresented by interested parties in the United States mining centres), a number of prospectors could be induced to direct their operations to this side of the International boundary line. The impetus this would give to one of the most important of the North-West interests, particularly in this portion of the Territories, would far more than compensate for the small expense which the adoption of this suggestion would involve.

#### *Irrigation.*

When in the neighbourhood of the Mormon settlement I took occasion to go over a stretch of country that I had not seen before, viz., to the east of St. Mary's River, Township 1, to Lethbridge. I found an extensive tract of slightly undulating country with a strong clay soil. I think the St. Mary's River could be cheaply brought on to irrigate this tract, and if this were done it would be second to none in Canada. While on this point I would particularly direct your attention to a scheme which the Great Northern Railway interests have in view, if international law will permit its consummation, that is, to dam the St. Mary's River south of the international boundary, cut a canal from above the dam to the Milk River, carry the water down the Milk River and irrigate along the Great Northern Line in Montana. The cost of the dam is estimated at a quarter of a million dollars and the cost of the canal a like amount, or half a million dollars in all. This would enable us to irrigate along the Milk River in our territory, but there the valley is narrow and no great quantity could be brought under successful irrigation, whereas I am told below Fort Belknap in Montana the valley is for a long distance over four miles in width. If it will pay the interest referred to to spend half a million to get water into the Milk River, would it not be much more profitable that the said water should be used to irrigate the tract mentioned, viz., to the east of St. Mary's River north of the international boundary, especially when it can be put on the land at probably one tithe of the cost of the other scheme? Does not international law prevent the diversion of a stream which is common to two countries?

#### *Railways.*

The completion of the Calgary and Edmonton Railway from here to Edmonton, and the construction of a considerable portion of the Calgary and Macleod Railway (the southern extension of the Calgary and Edmonton), has been an important factor in the development of the western portion of the Territories, and the prospect of the early construction of other roads in Alberta, now projected, will be a further stimulus to settlement. A large number of immigrants have made homes for themselves in Alberta during the past season, most of them being of a very desirable class. A large number of them form a portion of the exodus from Dakota to the Canadian North-West, which has this year considerably increased. Other portions of the Territories, which have not come so directly under my observation as Alberta, have, I understand, also increased their population considerably during the year.

#### *Natural Gas.*

No attempts have been made during the past year to obtain natural gas, except at Medicine Hat, in which case the attempt was successful. There is an agitation for a trial to be made in Calgary, and probably a test will shortly be made. There are grounds for thinking that if made it will be successful.

#### *Cattle Interests.*

The winter proved, for cattle, one of the best known for years; so much so, that quite a number of shipments of first-class beef were made to the coast in March.

*Sheep Raising.*

Sheep raising in the western portions of the Territories has continued to increase, and of late considerable interest has been manifested in it. The most favoured place for this being carried on seems to be between Swift Current and Maple Creek, though sheep are doing well at other points. A large band has lately been put on land purchased from the Alberta Railway and Coal Company in the neighbourhood of Lee's Creek. This band, it is expected, will be largely increased next year, and will probably be followed by several more at other points.

*Horses.*

The efforts to improve the breeds of horses in the ranching districts, which I referred to in my last annual report, are still being continued. The importation of high class stallions which is being carried on must, in a few years, exercise a very appreciable influence on the stock raised in the country. At the same time it can easily be perceived that there will, before long, be a plethora of a class of stock which, although valuable in its way, is not of a sufficiently high class to be exported, as it will not stand the cost of transportation. In this connection it may be noted that horsemen are urging that a heavy duty be placed on this class of horse, for the protection of the home market. At present large numbers of these horses are brought into our western country from Oregon and Montana where, the supply being largely in excess of the demand, they can be obtained at very low prices.

*Dairy Products.*

The experiment of a creamery of very considerable size has lately been made in the neighbourhood of Calgary, and with sufficient success to warrant the expectation that this is but the beginning of what will prove a very large industry in the near future. The prices realized for its products have been good. What is not required for local consumption is shipped to the Pacific coast.

*Crops.*

Practically everywhere throughout the North-West excellent crops of all kinds of cereals were obtained at the recent harvest.

*Prairie Fires.*

I would once more call attention to the necessity for some systematic organization on the part of settlers for the prevention of prairie fires, which annually inflict such damage on the country. In the ranching districts, where settlement is not thick, there is undoubtedly difficulty in the way of successfully combating these fires; but even an indifferent organization would be better than none at all.

*Stock Shipments.*

Shipments of live stock to the coast have greatly increased during the year. Several shipments have been made to England.

Some horses were, since my last report, taken from the Alberta Ranches and exhibited at the fairs in Eastern Canada, and probably they have gone on to England. The shipments were limited to Clydes and Shire horses, and they were sent merely for the purpose of advertising what the country could produce in this line.

*Tanneries.*

The matter of the establishment of tanneries in the North West, particularly in Alberta, which I have alluded to in previous reports, is one which I am surprised has not, so far, been taken up practically; for, not only does it afford a good opening for the investment of capital, but it must also be of great benefit both directly and indirectly to the stock-raisers.

*Mormons.*

When on the trip last mentioned, I embraced the opportunity of visiting the Mormon settlement, which consists of 70 families or 400 souls; with the Gentiles in the immediate vicinity, 500 in all. They think they have been very badly treated in the way of postal facilities, not having any yet. They have a small saw-mill and a grist mill in course of construction. They have taken out a ditch, so that they can irrigate the lands in the bottom where the village stands, and they have made the necessary surveys for another ditch, which can be readily and cheaply constructed, by which they will be enabled to irrigate 3,000 or 4,000 acres of bench land. These men state that owing to the nature of the subsoil the duty of water will be three times, or four times as great as where they have been accustomed to irrigate in Utah, and that by irrigation the finest of timothy can be grown. About half of the Mormons live in the village, the remainder being scattered to the east and to the west—to the west about 15 miles, and to the east about 6 miles. Messrs. Card and Pillings have a herd of 600 or 700 cattle, and Messrs. Card and Douglas a herd of about 5,000 sheep, which they purpose increasing next season to a very large extent. These people have bought most of their land from the Alberta Railway and Coal Company, and if the width of the quarantine belt could be reduced at one point to six miles, Salt Lake people are prepared to buy from the same company 50,000 acres to place stock on, and a portion of it may probably be irrigated by the Milk River.

*Woollen Factory.*

The woollen factory in the vicinity of Calgary referred to in my last annual report is still running, and appears to be successful in producing a good grade of native woollen goods.

I have the honour to be, Sir,

Your obedient servant,

WM. PEARCE,

*Inspector of Mines.*

The Secretary of the  
Department of the Interior,  
Ottawa.



## No. 3.

DEPARTMENT OF THE INTERIOR,  
OFFICE OF THE INSPECTOR OF AGENCIES,  
WINNIPEG, MAN., 31st October, 1891.

H. H. SMITH, Esq.,  
Commissioner of Dominion Lands,  
Winnipeg, Man.

SIR,—I have the honour to submit through you for the information of the Minister of the Interior a report on the work of my office for the year just closed.

In November, 1890, an investigation into charges preferred against Mr. Homestead Inspector Park was held at Fort Qu'Appelle, and, later in the month, inspections of the Dominion Lands and Crown Timber Office at Calgary were made.

In December inspections of the Dominion Lands and Crown Timber Offices at New Westminster and the Dominion Lands Offices at Kamloops, Lethbridge and Deloraine were made.

The month of January was spent in Ottawa attending to matters connected with the agencies.

During your illness, in the latter part of February and the early part of March, I took charge of your office.

In April, when inspecting the Crown Timber Office at Calgary, I discovered irregularities on the part of the agent, for which he was subsequently prosecuted.

Early in May I returned to Winnipeg, to relieve you during your absence in Ottawa. Later in the month I inspected the Dominion Land Office at Deloraine, and returned to Calgary to complete some unfinished work.

In July I inspected the Dominion Lands and Crown Timber Offices at New Westminster, and the Dominion Lands Office at Kamloops, and arranged for the removal of the Land and Timber Offices at New Westminster to provide increased accommodation for the Post Office. With this in view, I visited Victoria to confer with the resident engineer of the Department of Public Works.

In returning from New Westminster I inspected the office of the Superintendent of the Rocky Mountains Park, and, at the same time, in conjunction with Mr. Superintendent Pearce, looked into the working of the water supply of the Sanitarium Hotel in the Park.

In August I was called to Calgary in connection with the prosecution of the Crown Timber Agent. During this month inspections were made of the Dominion Lands and Crown Timber Offices at Edmonton, and the Dominion Lands Offices at Lethbridge and Regina.

I inspected the Dominion Lands and Crown Timber Offices at Prince Albert, and the Dominion Lands Office at Cannington Manor, in September, and also investigated and reported upon charges made against Homestead Inspectors Park and Arsenault.

In October I visited Ottawa in connection with the work of the agencies.

In addition to the work on the ground, the preparation of reports and checking of returns (2,244 in number) received from the agents have entailed a large amount of clerical work.

A statement giving an outline of the work performed at the several agencies during the year ending 31st October, 1891, accompanies this report.

I have the honour to be, Sir,

Your obedient servant,

J. M. GORDON,

*Inspector of Dominion Lands Agencies.*

STATEMENT giving an outline of the Work performed at the several Dominion Lands Agencies during the Year ended 31st October, 1891.

AGENCY.	Home- stead Entries.	SALES.		ENTRIES CANCELLED.		Mining Locations Recorded.	Hay Permits Issued.	PATENTS APPLIED FOR.		LETTERS.		Returns.
		Pre- emptions.	General.	Home- steads.	Pre- emptions.			Granted.	Refused.	Received.	Sent.	
Battleford .....	18	.....	3	13	3	.....	70	7	.....	315	616	60
Birtle .....	496	17	4	132	196	.....	233	114	76	3,694	2,862	54
Calgary .....	218	15	31	56	9	7	121	78	4	1,724	1,178	69
Coreau .....	84	1	5	39	23	.....	63	20	3	1,394	1,145	108
Edmonton .....	419*	14	55	25	7	2	90	44	3	1,385	964	54
Kamloops .....	62	7+	47	3	.....	.....	6	11	1	1,426	967	54
Lake Dauphin .....	121	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lethbridge .....	57	1	10	35	2	129	22	40	.....	1,354	1,217	54
Little Saskatchewan .....	212	19	15	110	46	.....	203	104	2	2,837	2,427	55
New Westminster .....	98	90+	62	69	.....	3	.....	114	.....	2,514	1,969	51
Prince Albert .....	56	3	3	11	8	.....	49	22	6	945	881	58
Qu'Appelle .....	494§	23	31	145	114	.....	302	147	16	4,738	4,653	55
Red Deer .....	90	1	3	23	5	.....	17	4	.....	485	357	.....
Souris .....	353	83	26	114	81	.....	387	235	26	5,511	5,025	66
Swift Current .....	13	.....	3	2	.....	.....	5	.....	.....	229	378	47
Touchwood .....	265	1	.....	16	6	.....	92	20	1	1,243	742	46
Turtle Mountain .....	235	51	29	97	73	.....	88	146	6	2,297	2,007	51
Winnipeg .....	234	29	97	112	40	.....	531	265	23	6,469	7,058	61
Totals .....	3,525	355	424	1,002	613	141	2,279	1,371	168	38,490	34,446	943

\* And one pre-emption.

† Homesteads.

‡ Homesteads.

§ Two pre-emptions.

|| For 6 months.

J. M. GORDON,  
*Inspector of Agencies.*

WINNIPEG, 31st October, 1891.

## No. 4.

## TIMBER, MINERAL AND GRAZING LANDS.

DEPARTMENT OF THE INTERIOR,  
OTTAWA, 23rd February, 1892.

A. M. BURGESS, Esq.,

Deputy Minister of the Interior, Ottawa.

SIR,—I have the honour to submit the twelfth annual report of the Timber, Mineral and Grazing Lands office of the Department of the Interior. Statements prepared by Mr. F. Loyer, book-keeper of this office, showing the revenue amounting to \$129,902.67, derived from Crown timber, mineral and grazing lands, but exclusive of sales of mineral lands, for the Departmental year which ended on the 31st of October last, are appended hereto; also the reports of the Crown Timber Agents at Winnipeg, Edmonton, Calgary, Prince Albert and New Westminster, B. C. The above amount includes the dues on timber and hay cut on school lands.

The revenue exceeded that of last year by \$4,024.55. There was an increase for timber dues of \$1,749.38; for grazing lands, \$3,952.42; stone quarries, \$19.10; and mining fees, \$551.30; but a decrease for hay lands of \$2,063.36; for royalty on coal lands, \$24.29; and for mill sites, \$160.00.

For the sake of reference and comparison, statements showing both by fiscal and departmental years the revenue received for timber, mineral and grazing lands from 1872 up to the 31st of October last, not including sales of mineral lands, have also been prepared and may be found at the end of this report.

The total revenue from the Winnipeg office amounted to \$34,855.62, being a decrease of \$3,200.94 as compared with the previous year.

The price of lumber within the Winnipeg agency varies from \$9.00 to \$19.00 per thousand B. M., according to the quality and kind of the lumber. There are twenty-one mills in operation within the agency cutting under Government license.

The revenue received from the British Columbia Crown Timber agency during last year was \$45,994.31, an increase of \$509.22. Of the amount collected, the sum of \$19,275.02 has been received for bonuses of berths put up to public competition. The total area acquired was about 205 square miles, averaging a bonus of \$94.02 per square mile. The total quantity of lumber manufactured for the year amounted to 30,507,439 feet B. M., as compared with 13,546,943 feet B. M. for last year, and sold at the rate of \$9.00 to \$10.00 per thousand. There are 14 mills within this agency cutting timber under license from the Dominion Government. Their capacity, &c., are shown in Schedule "B" annexed to the agent's report.

The total amount for dues collected within the Calgary agency during the year amounted to \$11,906.04, being an increase of \$3,693.12. The price of lumber at Calgary was from \$12.00 to \$18.00, at Cochrane \$16.00, at Fort Macleod \$17.00 to \$40.00, and at Cypress Hills \$10.00. Ten saw mills were operating within this agency last year under Government license, and several portable mills under permit.

The total amount of dues collected within the Edmonton agency was \$6,567.80, being an increase of \$1,592.38 as compared with the previous year. The price of lumber at Edmonton during the year was \$10.00 to \$20.00 per thousand feet B. M. The agent reports three saw mills in operation within his agency.



The total amount of dues collected within the Prince Albert agency was \$6,124.84, being a decrease of \$1,237.97 as compared with the previous year. Lumber sold at Prince Albert from \$20.00 to \$42.00 per thousand. There is only one saw mill in this agency cutting timber under license, namely, the one at Prince Albert erected by Messrs. Moore & Macdowall in 1876. There are, however, several saw mills at Prince Albert and Battleford cutting timber under permit.

Saw mill returns received at the head office give the following quantities of building material as having been manufactured and sold during the year within the five agencies:—

	Manufactured.	Sold.
Sawn lumber.....	52,530,530	50,749,240
Shingles.....	4,797,000	3,948,216
Laths.....	967,350	1,200,200

Statements showing the quantity of lumber manufactured from 1872 to 31st December, 1890, and lettered "F," "G," "H," "I," "J," "K" and "L," accompany this report.

Ninty-two licenses to cut timber over a total area of 2,435.66 square miles were issued during the year. The area licensed in the Province of Manitoba, the three Provisional Territorial Districts, and on Dominion Lands in the Province of British Columbia, are as follow:—

	Miles.
Manitoba .....	569.52
Alberta .....	1435.72
Assiniboia.....	59.75
Saskatchewan .....	197.83
British Columbia.....	172.84

The number of applications received during the year to cut timber was 83, of which 58 were for licenses to cut timber in Manitoba and the North-West Territories, and the remainder to cut timber on Dominion Lands in British Columbia. The number of applications during the previous year was 88. Within the past year 24 berths have been cancelled, owing to the persons to whom they were granted not having complied with the provisions of the regulations. The total area of these berths was approximately 1,200 square miles. The number of berths still under license or authorized to be licensed in the Province and Territories is 152, and on Dominion Lands in British Columbia, 116.

#### *Mining Lands other than Coal.*

Returns from the Dominion Lands Agents show that during the past year 158 entries were made for mining locations other than coal. The revenue from these mining lands for the year was \$1,992.20, of which amount the sum of \$732.30, was received in payment of fees for entry, and for registration of assignments. The total area of mining locations sold up to date is 1,571.19 acres, which realized \$7,939.65.

All minerals, with the exception of coal, on Dominion Lands within the railway belt in the Province of British Columbia are administered under the mining laws of that Province. This is in accordance with an arrangement made between the Federal and Provincial Governments, and ratified by Orders in Council dated the 11th and 28th of February, 1890. This agreement may be terminated at any time by either Government.

Under the above arrangement 136 claims have been recorded with the Provincial Government, and three locations have been sold through that Government.

By an Order in Council dated the 25th August, 1891, petroleum lands were withdrawn from the operations of the Mining Regulations. All entries made for petroleum locations anterior to the 8th of October last are being dealt with in accordance with the provisions of these Regulations. No entries have been granted subsequent to that date.

*Coal Mining Lands.*

The number of applications received during the year was 47, and 22 of the applicants were given the privilege of purchasing within a specified time the locations for which they applied. Three of the applicants were given permission to prospect, and four of them bought the land applied for, or a portion thereof.

The revenue for the year derived from the sale of coal lands was \$2,200.00, being a decrease of \$6,698.75 over the previous year. The total area of coal lands sold up to date is 13,299.76 acres, and the total amount received therefor, \$137,270.07.

*Grazing Lands.*

The total number of leases issued by the Department to the 31st October, 1891, is 235. A number of these leases have been cancelled. The number of leases now in force is 139, covering a total area of 2,213,677.11 acres.

The following schedule shows the names of the lessees of grazing lands, the number of their ranches, and the area covered by their leases:—

No. of Ranche.	Name.	Area in Acres.	No. of Ranche.	Name.	Area in Acres.
1	North-West Cattle Co. ....	44,000	153	Capt. W. Thorburn .....	2,835
2	do do .....	58,925	154	D. McEachran .....	16,640
11	Alex. Begg .....	320	160	J. K. Kerr .....	42,700
16a	D. McEachran .....	16,391	167	Glegarry Rancho Co. ....	52,320
16b	do .....	29,332	176	McDermid & Ross .....	36,588
22	Stewart Rancho Co. ....	23,000	189	Greely & Wood .....	4,480
25	Cochrane Rancho Co. ....	73,500	193	Cypress Cattle Co. ....	38,750
28	A. B. Few .....	100,000	195	Riddell & Green .....	13,400
33	New Oxley (Canada) Rancho Co. ....	7,000	197	W. C. Skrine .....	6,938
34	Cochrane Rancho Co. ....	33,000	201	A. Adzit .....	1,920
35	North-West Cattle Co. ....	55,000	206	H. D. & F. E. Beveridge .....	3,675
35a	Moore & Martin .....	33,700	207	D. Macpherson .....	18,800
36	C. W. Martin .....	59,270	217	W. Carter .....	5,120
38	Alfrey & Brooke .....	10,000	240	W. G. Conrad .....	32,580
42	Bow River Horse Rancho Co. ....	34,788	244	W. Tait .....	960
45	Wells & Brown .....	12,000	247	Geo. Alexander .....	2,232
48	New Oxley (Canada) Rancho Co. ....	80,000	248	A. E. Cross .....	11,000
55	Winder Rancho Co. ....	50,000	256	H. H. Bailey and associates .....	2,880
56	Bell Brothers .....	5,000	264	Geo. Alexander .....	2,250
59	New Oxley (Canada) Rancho Co. ....	62,934	265	Jonathan Henderson .....	1,280
59a	C. W. Martin .....	37,066	268	F. W. & J. W. Ings .....	7,040
62	Brunskill & Geddes .....	8,606	281	F. E. Beveridge .....	22,000
65	Bell & Patterson .....	6,000	287	S. L. Bedson .....	880
74	Sir J. Walrond .....	100,000	288	O. Greig .....	5,000
77	New Oxley (Canada) Rancho Co. ....	100,000	289	Canadian Pacific Colonization Cor- poration .....	44,000
82	Walrond Rancho Co. ....	100,000	290	A. Casewell .....	1,920
92	W. G. Conrad .....	100,000	295	C. W. Martin .....	14,666
93	Garnett Bros. ....	20,000	305	J. C. Slater .....	320
94	F. W. Godsall .....	4,061	308	J. & R. Mitchell .....	2,400
96	W. T. N. Scobie .....	12,000	309	Canadian Pacific Colonization Cor- poration .....	11,000
101	Alberta Rancho Co. ....	25,510	310	Joseph Fisher .....	2,327
104	W. B. Irving .....	5,280	311	Boright & Parsons .....	6,400
108	D. McDougall .....	6,000	315	H. T. Morton .....	640
111	J. Walter Ings .....	1,920	316	J. H. Willoughby .....	2,560
116	N. Boyd .....	5,120	317	Francis White .....	34,529
120	M. Oxarart .....	11,000	318	T. W. Peacock .....	1,120
122	Geo. Alexander .....	40,800	319	Sir John Lister Kaye .....	1,920
123	W. C. Skrine .....	8,200	320	Chas. Carey .....	1,920
124	B. M. Godsall .....	720	321	James Fidler .....	2,240
126	W. H. Somerton .....	9,700	322	W. & A. Blakely .....	1,440
129	Rev. J. McDougall .....	8,260	325	E. Fearon .....	480
135	D. Macpherson .....	41,400	326	R. Mitchell .....	2,240
137	Brown Rancho Co. ....	33,500	327	P. Byrne .....	480
140	J. B. Boustead .....	88,000	328	J. Mitchell .....	2,240
141	P. McLaren .....	7,500	329	Lachlan Collie .....	306
143	T. P. McHugh & Co. ....	9,700	331	E. Murray-Honey & Lewis Parsons .....	5,280
146	Canadian Agricultural, Coal and Colonization Co. ....	32,062			



Schedule of the names of the lessees of grazing lands, the number of their ranches, and the area covered by their leases—*Continued.*

No. of Ranch.	Name.	Area in Acres.	No. of Ranch.	Name.	Area in Acres.
332	C. P. Ohlson	1,280	357	F. W. Peacock	513
333	R. G. Robinson	1,120	358	J. & R. Mitchell	960
334	Wm. Collie	160	360	L. Copeland (hay lease)	40
335	Thos. J. Spence	427	361	H. Anticknap (hay lease)	160
336	John Walter	1,445	363	D. C. Stewart (hay lease)	40
337	Chas. McCarthy	480	364	J. C. M. Davis (hay lease)	40
338	Frank Ward	160	365	Neil Hanson	640
340	Robert McKernan	1,920	367	Geo. Anderson	640
341	Geo. J. Gagon & W. A. H. a'Court	5,760	368	Thos. Johnson	1,920
342	Samuel Perry (5 years hay lease)	40	369	Grier & Smith	741
343	Walter R. Johnson	2,400	370	C. P. Ohlson	640
344	A. F. Wallace	1,920	372	G. P. Ashe	213
345	M. H. Boulais	321	373	John Covil	1,280
346	T. O. Davis	320	374	L. C. Brown	640
347	Jeremiah M. J. Mulvihill	259	375	D. H. Gillespie (hay lease)	149.61
348	Leeson & Scott	1,920	377	John Cheeseman	320
349	John G. Collins	1,280	378	J. R. Greig	2,560
350	L. G. McDonald	320	379	T. L. Engman (hay lease)	25
351	Samson & Harford	27,200	380	R. G. Robinson	800
352	Thos. Johnson	2,560	381	Cochrane Ranch Co	60,000
353	W. W. Stuart	2,080	384	G. A. McCarthy	2,404.50
354	Sibbald & Alford	1,280	385	W. N. Adsit	1,120
355	Alfred Chevigny	960			
356	Wm. Grahame	477		Total area	2,213,677.11

These lands are situated principally in the district of Alberta and the southern portion of Assiniboia, with a few tracts in the district of Saskatchewan and the Province of Manitoba.

The number of applications received for leases of grazing lands during the year was 105.

The amount received for rent of grazing lands was \$16,550.10, as compared with \$12,597.68 for the year which ended on the 31st October, 1890.

The following statement shows approximately the total number of cattle, horses and sheep in what are known at present as the grazing districts of Alberta and Assiniboia, as reported by lessees of ranches, and computed from information derived from other sources:—

Cattle	121,116
Horses	16,463
Sheep	61,491

The following is a statement of the work performed during the year:—

Number of letters sent	3,197
Number of pages of memoranda and schedules	1,012
Number of plans and sketches prepared	311
Number of notices inviting tenders for timber berths	4,800

Timber—

Number of berths applied for	83
Number of berths acquired by public competition	61
Number of licenses for timber berths drawn up	93
Instructions issued for surveys of timber berths	18
Number of returns of surveys of timber berths received and examined	27
Number of returns for saw-mills received and verified	141
Number of permits to cut timber issued by agents, also entered and checked over at this office	3,621
Number of timber seizures entered and checked over at this office	382



## Grazing :—

Number of applications for grazing lands received.....	105
Number of leases of grazing lands authorized to be issued.....	29
Number of leases of grazing lands issued.....	27
Number of leases of hay lands issued.....	6
Number of applications for hay lands.....	20
Number of permits to cut hay issued by the Dominion Lands Agents, also entered and checked over at this office .....	2,433
Number of hay seizures entered and checked over at this office .....	85

## Mining :—

Number of applications for coal locations received.....	47
Number of coal locations of 320 acres and less sold.....	4
Number of applications for mineral locations other than coal.....	325
Number of entries for mining locations granted by Dominion Lands Agents .....	158
Number of mining locations other than coal sold.....	5
Number of stone quarries applied for.....	9
Number of mill sites applied for.....	3
Number of applications for water power.....	6

I have the honour to be, Sir,

Your obedient servant,

G. U. RYLEY,

*Clerk of Timber, Mineral and Grazing Lands.*

## A.

## STATEMENT of Receipts on account of Crown Timber, for the Year ending the 31st October, 1891.

Month.	Bonus.	Ground Rent.	Royalty and Returns of Sales.	Permit Fees and Dues.	Seizures, Dues and Fines for Trespass.	Refunded Disbursements.	Miscellaneous.	Totals.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1890.								
November.....	1,729 75	3,100 00	1,274 95	1,103 20	495 14			7,703 04
December.....	10,332 00	483 50	1,000 20	2,464 65	140 22			14,420 57
1891.								
January.....	2,097 00	387 04	422 13	1,972 37	215 71			5,094 25
February.....	85 00	321 30		5,986 50	162 01			6,554 81
March.....	1,492 70	1,327 52	47 62	5,211 22	305 47			8,384 53
April.....	4,269 92	868 86	670 23	1,457 04	439 67			7,705 72
May.....	939 40	1,617 72	278 09	4,134 47	165 11	62 25		7,197 04
June.....	20 00	1,446 44	2,628 34	1,465 37	44 70			5,604 85
July.....		973 96	6,025 49	1,208 41	32 44	3 00		8,243 30
August.....		278 01	1,259 19	5,643 58	320 49	45 38		7,546 65
September.....	1,000 00	1,195 64	1,569 17	880 16	105 54			4,750 51
October.....	380 00	2,349 40	9,757 45	7,751 04	933 77	6 80	2 00	21,180 46
	22,345 77	14,349 39	24,932 86	39,278 01	3,360 27	117 43	2 00	104,385 73
Revenue derived from timber cut on school lands .....								314 41
Total.....								104,700 14

DEPARTMENT OF THE INTERIOR,  
TIMBER AND MINES OFFICE,  
OTTAWA, 21st November, 1891.

## B.

STATEMENT of Receipts on account of Grazing, Hay and Mineral Lands, for the Year ending the 31st October, 1891.

Month.	Grazing Lands.		Hay Lands.	Mining Fees.	Royalty from Coal Lands.	Royalty from Stone Quarried.	Rent from Mill Sites, Scrip.	Totals.
	Cash.	Scrip.						
1890.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
November.....	55 46	800 00	490 37	5 00				1,350 83
December.....	156 43	1,337 77	199 80	10 00	1 00	9 00		1,714 00
1891.								
January.....	59 92		114 60	250 00				424 52
February.....	308 60	480 00	109 26	10 00		10 00		917 86
March.....	63 80	1,200 00	36 20	85 00				1,385 00
April.....	49 90		423 60	25 00				498 50
May.....	53 70	3,596 00	882 30	57 00	12 00			4,601 00
June.....	302 82	4,980 00	604 10	55 30	160 00			6,102 22
July.....	440 36	402 60	917 60	42 00				1,802 56
August.....	131 15		1,369 80	105 00				1,605 95
September.....	383 63	1,400 00	444 25	66 00	1 50			2,295 38
October.....	347 96		252 70	22 00		25 05		647 71
School Lands..	2,353 73	14,196 37	5,844 58	732 30	174 50	44 05		23,345 53
			1,857 00					1,857 00
	2,353 73	14,196 37	7,701 58	732 30	174 50	44 05		25,202 53

DEPARTMENT OF THE INTERIOR,  
TIMBER AND MINES OFFICE,  
OTTAWA, 21st November, 1891.



## C.

## STATEMENT of Receipts from School Lands on account of Timber Dues and Hay Lands for the Year ending the 31st October, 1891.

Month.	Timber Dues.	Hay Lands.	Totals.	Province of Manitoba	North-West Territories.			Totals.
					Assiniboia.	Alberta.	Saskatchewan.	
1890.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
November.....	* 34 85	71 90	106 75	104 25	.....	2 50	.....	106 75
December.....	* 42 50	22 90	65 40	61 85	0 30	0 50	2 75	65 40
1891.								
January.....	* 28 50	61 90	90 40	41 15	20 00	0 25	29 00	90 40
February.....	* 44 36	32 35	76 71	71 41	2 30	.....	3 00	76 71
March.....	* 94 75	15 70	146 95	103 25	.....	36 50	7 20	146 95
do.....	+ 36 50							
April.....	* 22 15	261 10	283 25	253 65	.....	26 60	3 00	283 25
May.....	0 25	353 70	353 95	245 10	82 40	22 75	3 70	353 95
June.....		229 90	229 90	196 90	17 50	11 50	4 00	229 90
July.....		328 90	328 90	301 20	12 20	10 00	5 50	328 90
August.....		382 55	382 55	265 65	82 10	15 10	19 70	382 55
September.....	* 9 25	66 40	75 65	53 70	17 00	1 70	3 25	75 65
October.....	* 1 30	29 70	31 00	19 20	11 80	.....	.....	31 00
Total.....	314 41	1,857 00	2,171 41	1,717 31	245 60	127 40	81 10	2,171 41

Amounts collected at Crown Timber Office, Winnipeg, shown thus, \*  
Amounts collected at Crown Timber Office, Edmonton shown thus, +

DEPARTMENT OF THE INTERIOR,  
TIMBER AND MINES OFFICE,  
OTTAWA, 21st November, 1891.

2D.—STATEMENT of Receipts on account of Timber, Grazing, Hay and Mineral Lands, commencing with Fiscal Year 1872-73 and ending the 30th June, 1891.

Fiscal Year.	Timber Dues.		Grazing Lands.		Hay Lands.		Rents and Bonuses from Coal Lands.		Mining Fees.		Royalty for Stone Quarried.		Rent from Mill Sites Scrip.		Gross Revenue.		Refunds.		Net Revenue.	
	Cash.	Scrip.	Cash.	Scrip.	Cash.	Scrip.	Cash.	Scrip.	%	cts.	%	cts.	%	cts.	%	cts.	%	cts.	%	cts.
1872-73.....															109 25				109 25	
1873-74.....															2,710 55				2,710 55	
1874-75.....															2,335 25				2,335 25	
1875-76.....															387 00				387 00	
1876-77.....															320 00				320 00	
1877-78.....															1,620 00				1,620 00	
1878-79.....															325 00				325 00	
1879-80.....															25,121 46		8 50		25,112 96	
1880-81.....															32,028 34		21 00		32,007 34	
1881-82.....															61,038 14		30 00		61,008 14	
1882-83.....															113,824 80		3,462 80		110,362 00	
1883-84.....															139,994 60		716 50		139,278 10	
1884-85.....															105,380 37		140 92		105,239 45	
1885-86.....															98,798 73		4,009 53		94,789 20	
1886-87.....															120,492 58		13,471 07		107,021 51	
1887-88.....															126,204 03		10 02		126,254 01	
1888-89.....															113,246 87		1,110 68		112,136 19	
1889-90.....															104,212 23		1,296 80		102,915 43	
1890-91.....															130,964 47		79 76		130,884 71	
Totals, Gross Revenue.....															1,199,173 67		24,357 58		1,174,816 09	
Deduct Refunds.....															24,357 58					
Totals, Net Revenue.....															1,174,816 09					

DEPARTMENT OF THE INTERIOR,  
TIMBER AND MINES OFFICE, Ottawa, 21st November, 1891.

E.—STATEMENT of Receipts on account of Timber, Grazing, Hay and Mineral Lands, commencing with the Departmental Year 1872-73 and ending the 31st October, 1891.

From 1st November to 31st October each year.	Timber Dues.	Grazing Lands.		Hay Lands.		Rents and Bonuses from Coal Lands.	Mining Fees.	Royalty for Stone Quar- ried.	Rent from Mill Sites Scrip.	Gross Revenue.		Refunds.		Net Revenue.
		Cash.	Scrip.	Cash.	Scrip.					£	cts.	£	cts.	
872-73	662 05									662 05				662 05
873-74	2,347 00									2,347 00				2,347 00
874-75	2,146 00									2,146 00				2,146 00
875-76	387 00									387 00				387 00
876-77	320 00									320 00				320 00
777-78	1,820 00									1,820 00				1,820 00
878-79	3,388 15									3,388 15				3,388 15
879-80	31,339 95									31,339 95				31,331 45
880-81	44,524 35									44,524 35				44,503 35
881-82	75,781 26	10,123 60				80 00				85,984 86				85,954 86
882-83	150,712 27	18,778 83				880 00				170,466 82				166,896 52
883-84	93,765 86	10,642 50			135 20	541 30				105,157 05				104,548 05
884-85	63,533 84	20,342 74			481 60	150 00				84,956 16				81,740 96
885-86	70,927 70	26,723 72	20,613 20		1,223 45	40 00				119,825 94				116,838 25
886-87	77,871 91	11,528 77	28,048 33		1,796 50					119,479 72				118,054 09
887-88	91,538 24	5,988 42	20,260 41		3,289 57					121,432 24				121,419 20
888-89	76,203 83	1,635 08	16,802 63		6,909 55					101,864 47				100,161 91
889-90	102,032 58	3,036 05	9,541 63		8,235 67					123,413 17				122,672 66
890-91	104,385 73	2,353 73	14,196 37		5,844 58					127,731 26				127,683 11
Totals, Gross Revenue. . .	993,687 72	111,173 44	109,462 66		27,916 12	160 00	2,024 49		160 00	1,247,246 19			24,371 58	1,222,874 61
Deduct Refunds. . . . .	23,867 63	131 60			187 35		160 00			24,371 58				
Totals, Net Revenue. . . .	969,820 09	111,041 84	109,462 66		27,728 77	160 00	1,864 49		160 00	1,222,874 61				

DEPARTMENT OF THE INTERIOR,  
TIMBER AND MINES OFFICE,  
OTTAWA, 21st November, 1891.



F.—STATEMENT showing the quantity of Lumber, Shingles and Laths, manufactured from timber cut on what was known as the "Disputed Territory," under Government license, for the period from 1872 to the 31st December, 1888.

Mill book folio.	Names.	Lumber. Feet, B.M.	Shingles.	Laths.	Remarks.
1	The Rainy Lake Lumber Co. ....	6,151,142	498,187	250,000	10,887 railway ties.
2	do do .....	17,766,247	2,588,500	2,033,450	
3	Keewatin Lumbering and Mfg. Co. . .	34,070,636	11,324,750	5,478,550	
4	Dick, Banning & Co. ....	12,152,474	3,865,750	2,750,850	
5	F. T. Bulmer & Co. ....	1,150,276	.....	261,000	
6	do do .....	2,837,369	.....	.....	
	Total .....	74,128,144	18,277,187	10,773,850	

DEPARTMENT OF THE INTERIOR,  
TIMBER AND MINES OFFICE,  
OTTAWA, 21st November, 1891.

### PROVINCE OF MANITOBA.

G.—STATEMENT showing the quantity of Lumber, Shingles and Laths, manufactured from Dominion Lands in the Province of Manitoba, under Government license, for the period from 1872 to the 31st December, 1890.

Mill book folio.	Name.	Lumber. Feet, B.M.	Shingles.	Laths.	Railway Ties, &c.	Remarks.
10	W. J. M. Pratt ..	661,626	809,250	47,000	.....	Ceased manufacturing, Oct. 31, '83.
11	E. Shore & Co. ....	1,961,429	.....	1,054,100	.....	do do Sept. 30, '83.
12	Dick & Banning. ....	1,543,789	.....	.....	.....	do do June 30, '81.
13	Walkley & Burrows. .	4,574,716	.....	866,300	.....	do do Aug. 31, '83.
14	N. W. Lumber Co. and Jas. Corcoran. .	7,434,058	235,250	229,550	.....	do do Nov. 9, '88.
15	Macaulay & Jarvis. .	4,960,868	.....	385,700	.....	do do Dec. 31, '79.
16	D. E. Sprague. ....	14,512,854	.....	1,046,450	.....	.....
17	David Ross. ....	18,891,244	.....	.....	124,451	.....
18	Jarvis & Berridge. .	5,359,901	.....	.....	.....	do do July 27, '81.
19	Imp. Bank of Canada	1,619,284	693,000	22,600	34,561	.....
20	Mitchell & Byers. ....	804,503	473,000	.....	.....	do do Dec. 31, '86.
21	} Alex. Cameron. ....	1,163,740	.....	.....	8,364	.....
22		.....	.....	.....	.....	.....
23	Jas. Jermyn. ....	2,252,011	1,640,155	546,345	19,667	.....
24	R. Z. Rogers. ....	137,248	.....	.....	.....	do do Dec. 31, '81
25	W. H. Whimster ..	4,879,747	2,531,500	.....	.....	.....
26	Geo. J. Brouse & Co.	1,081,294	2,491,750	166,000	.....	do do Sept. 30, '88
27	C. A. Brouse .....	1,298,266	10,000	27,000	.....	.....
28	} Miller & Patton. ....	7,381,462	2,483,375	185,250	189,443	.....
29		.....	.....	.....	.....	.....
30	Jas. McKay. ....	371,289	462,500	.....	.....	do do Feb. 28, '86
32	Dick & Banning .....	5,430,857	25,000	66,000	.....	do do Oct. 30, '85
33	Miller & Patton(Gunn)	377,237	25,000	.....	.....	do do Aug. 31, '83
34	Brown, Rutherford & Neilson. ....	1,947,935	.....	.....	.....	do do July 31, '83
35	Brown, Rutherford & Neilson. ....	10,151,582	.....	.....	.....	.....

G.—STATEMENT showing the Quantity of Lumber, Shingles and Laths, manufactured, &c., 1872, to 31st December, 1890.

Mill Book Folio.	Name.	Lumber.	Shingles.	Laths.	Railway Ties.	Remarks.
36	Alfred Watts.....	528,374	1,076,000			Ceased manufacturing, Sept. 30, '87
37	Jermyn & Bolton ...	1,286,234	729,250	141,000		do do do '85
38	Williams & Harrison.	603,223	1,104,500	22,353		do do do '87
39	Peter McArthur.....	850,000				
40	E. T. Smart & Co....	69,964	151,000			
41	Hudson Bay Co. ....	607,441	452,500	6,000		do do Dec. 31, '85
42	Samuel Smith.....	1,273,591	1,188,000	43,100		do do Feb. 28, '88
43	Thomas L. Fox.....	326,163	425,250			do do Oct. 31, '84
44	Dick & Banning.....	5,934,112				do do July '87
45	C. A. Boulton.....	480,000	200,000			do do April 30, '86
46	Shields & Co.....	4,258,918	87,000		16,157	do do Mch. 31, '86
47	Jonasson, Fredrickson Bros. ....	2,081,669		576,550		do do June 30, '87
48	Mitchell & Bucknall..	3,603,245	768,000	156,300	156,744	
49	Selkirk Lumber Co. . .	9,508,988		229,300		
50	James Jermyn.....	478,911	219,500	56,900		do do Nov. 5, '89
51	Manitoba and N. W. Railway Co. ....	451,774	7,440	76,212		do do Sept. 30, '88
52	Federal Bank of Canada ..	5,065,926	20,000	25,200		
53	Wells Bros.....	142,457				do do Mch. 14, '89
54	David McFadyen....	1,249,000	1,339,000			
55	George Morton.....	454,500	225,000			
56	George Morton.....	77,000	60,000			
57	Sgt. Jonasson.....	3,881,545	4,030,500	255,150		
58	Woods & Co. (Likely)	745,030	400,440			do do Oct. 31, '89
59	Drake & Co.....	351,490				
60	Alfred S. Wells.....	398,219				
	George Hancock.....	45,000				do do Mch. 31, '90
	Totals. ....	143,549,714	24,363,160	6,230,360	549,387	

DEPARTMENT OF THE INTERIOR,  
TIMBER AND MINES OFFICE,  
OTTAWA, 21st November, 1891.

#### DISTRICT OF ASSINIBOIA.

H.—STATEMENT showing the quantity of Lumber, Shingles and Laths, manufactured from timber cut on Dominion Lands within the District of Assiniboia, under Government License, from 1872 to the 31st December, 1890.

Mill book folio.	Name.	Lumber. Feet B.M.	Shingles.	Laths.	Remarks.
120	John Stewart.....	595,665	19,000		Ceased manufacturing 31st May, 1887.
121	Louis Sands.....	1,350,272	893,000	134,200	
		1,945,937	912,000	134,200	

DEPARTMENT OF THE INTERIOR,  
TIMBER AND MINES OFFICE,  
OTTAWA, 21st November, 1891.

## DISTRICT OF ALBERTA.

I.—STATEMENT showing the quantity of Lumber, Shingles and Laths, manufactured from timber cut on Dominion Lands within the District of Alberta, under Government License, for the period from 1872 to 31st December, 1890.

Mill book folio.	Name.	Lumber Feet B.M.	Shingles.	Laths.	Railway Ties.	Remarks.
150	James Walker.....	3,341,844	1,043,000	452,500	.....	South Alberta.
151	Peter McLaren.....	2,407,635	332,625	40,633	.....	do
152	do do.....	2,785,566	500,250	19,700	.....	do
153	Eau Claire and Bow River Lumber Co..	8,429,786	.....	1,719,050	3,305	do
154	Alberta Lumber Co..	.....	.....	.....	.....	do
155	North Western Coal N. Co.....	4,195,044	317,000	.....	.....	do
156	Calgary Lumber Co..	930,023	237,750	558,600	.....	do
157	Donald Morrison.....	237,386	.....	.....	.....	Ceased manufacturing, Oct. 31, '87.
158	Jno. Lineham.....	450,000	104,000	8,500	.....	do do
159	W. D. Lineham.....	.....	.....	.....	.....	do do
180	His Lordship Bishop of St. Albert.....	335,811	273,500	.....	.....	North Alberta.
181	Hudson Bay Co.....	1,405,635	334,000	.....	.....	do
182	Moore & Macdowall..	2,260,732	891,000	261,400	.....	do
183	Lamoureux Bros.....	1,807,510	1,440,166	354,750	.....	do
184	Richard Hardisty....	619,090	500,333	24,975	.....	do
		29,206,062	5,973,624	3,440,108	3,305	

DEPARTMENT OF THE INTERIOR,  
TIMBER AND MINES OFFICE,  
OTTAWA, 21st November, 1891.

## DISTRICT OF SASKATCHEWAN.

J.—STATEMENT showing the Quantity of Lumber, Shingles and Laths, manufactured from timber cut on Dominion Lands within the District of Saskatchewan, under Government License, for the period from 1872 to the 31st December, 1890.

Mill book folio.	Name.	Lumber Feet, B.M.	Shingles.	Laths.	Remarks.
200	Moore & Macdowall .....	6,269,656	4,690,465	3,260,700	

DEPARTMENT OF THE INTERIOR,  
TIMBER AND MINES OFFICE,  
OTTAWA, 21st November, 1891.



PROVINCE OF BRITISH COLUMBIA.

K.—STATEMENT showing the Quantity of Lumber, Shingles and Laths, manufactured from timber cut on Dominion Lands, within the Railway Belt, for the period from 1884 to the 31st December, 1890.

Mill book folio.	Name.	Timber, Feet, B.M.	Shingles.	Laths.	Remarks
210	Palliser Lumber Co.....	5,270,053			
211	W. C. McDougall.....	2,472,659			
212	Columbia River Lumber Co.....	8,054,480	137,000		
213	Royal City Planing Mills Co....	57,262,972			
215	Otter Tail Lumber Co.....	1,034,285		20,000	
216	Knight Bros.....	119,575			
217	John McDonald.....	1,100,000			
218	Henry West.....	495,809			
219	Brunette Saw Mill Co.....	9,593,962			
220	Grant & Kerr.....	3,423,094			
221	S. F. McKay.....	800,000			
222	G. O. Buchanan.....	115,500			
223	Shuswap Milling Co.....	930,100			
224	Stein & Robinson.....				None cut.
225	H. V. Edmonds.....	3,609,150			
226	MacLaren Ross Lumber Co. ....	3,924,947			
227	Genelle Bros.....	152,000			
	Totals.....	98,358,586	137,000	20,000	

DEPARTMENT OF THE INTERIOR,  
TIMBER AND MINES OFFICE,  
OTTAWA, 21st November, 1891.

SUMMARY.

L.—STATEMENT showing the Quantity of Lumber, Shingles and Laths, manufactured from timber cut on Dominion Lands.

Statement Lettered.	Province or District.	Lumber, Feet, B.M.	Shingles.	Laths.	Railway Ties.
F	What was known as the "Disputed Territory".....	74,128,144	18,277,187	10,773,850	
G	Province of Manitoba.....	143,549,714	24,363,160	6,230,360	549,387
H	District of Assiniboia.....	1,945,937	912,000	134,200	
I	do Alberta.....	28,968,676	5,973,624	3,440,108	3,305
J	do Saskatchewan.....	6,269,656	4,690,465	3,260,700	
K	Province of British Columbia.....	98,358,586	137,000	20,000	
	Totals.....	353,220,713	54,353,436	23,859,218	552,692

DEPARTMENT OF THE INTERIOR,  
TIMBER AND MINES OFFICE,  
OTTAWA, 21st November, 1891.  
[PART I]

## WINNIPEG CROWN TIMBER AGENCY.

CROWN TIMBER OFFICE,  
WINNIPEG, February 22nd, 1892.

SIR,—I have the honour to submit the thirteenth annual report of this district branch of the Department of the Interior, which as usual is accompanied by a complete statement of the business transacted therein for the year ending the 31st October, 1891.

The total cut of lumber at the mills operating within this agency during the year amounts to 16,133,988 feet.

For comparison, and as indicating the volume of business done at the mills in the Province of Manitoba during respective years, I have compiled the following statement, which may be taken as nearly accurate:—

	Feet Lumber.
1879 .....	3,002,007
1880 .....	9,118,311
1881 .....	9,890,134
1882 .....	14,811,843
1883 .....	26,720,091
1884 .....	13,667,317
1885 .....	7,750,029
1886 .....	8,449,454
1887 .....	9,574,599
1888 .....	8,509,187
1889 .....	13,826,827
1890 .....	13,943,973
1891 .....	16,133,988
Total .....	<u>155,400,760</u>

Prior to the year 1888, before the district known as the Disputed Territory became a portion of the Province of Ontario, the output of lumber at the mills operating therein was accounted for in my annual statement.

In completing the statement above I omitted that amount, as not being properly manufactured in the Province of Manitoba.

It is the general opinion of our lumbermen that there will be a gradual falling off in the amount of spruce lumber manufactured in Manitoba from this out. This they attribute to two causes. First, all the timber of a quality suitable for manufacture, situated within easy distance from markets, has been cut away, making it more expensive to handle. Secondly, the timber being chiefly spruce, it does not stand competition with pine shipped in from the east and south, and the products of the British Columbia forest from the west, which are now being placed on the market at a price very little in advance of spruce, and in such quantities as to amply fill all demands.

During the year 1883 the output of lumber at the mills manufacturing on Lake Winnipeg was 12,400,706 feet. The coming summer only three out of nine will run on this lake, the estimated cut being less than 3,000,000 feet.

Active operations are going on, on the south and east sides of the Riding Mountains, and on the west side of Duck Mountain.

The timber in this locality has been pretty well burnt over, and it and the cutting is chiefly of that class, the trade in which has been greatly stimulated by the reduction made in royalty dues thereon from five to two and one-half per cent. on selling value.

The prices for fuel have not varied much from figures quoted last year.

Cordwood, of which about 35,000 cords was consumed during the year in Winnipeg, brought on an average \$2.25 to \$4.25 per cord for poplar and spruce respectively.

About 27,000 tons of American anthracite coal was shipped into Manitoba and the North-West Territories during the last year, of which quantity 18,000 tons was placed on the Winnipeg market. This coal sells for \$9.00 per ton on the car.

The Canadian anthracite, mined at Anthracite, N.W.T., is growing in public favor, no less than 50 cars having been sold in Winnipeg within the last three months. The price asked for same is \$8.00 per ton on car.

American soft coal is no longer offered on this market, the native coal from our western fields having taken its place.

The Galt coal, mined at Lethbridge, N.W.T., is selling in car lots at \$7.00 per ton.

Mining on a small scale is going on in many parts of the North-West Territories for local consumption.

The output at the pits opened in Townships 1 and 2, Range 6, West of the 2nd Meridian, for the supply of settlers residing thereabouts, amounted, in the year, to 632 tons, the price being \$1.00 per ton at mouth of pit.

The extension of the Brandon and Souris branch of the Canadian Pacific Railway to the Souris coal fields offers facilities for the supply of coal to all parts of Manitoba, at a saving of nearly 600 miles in distance from the nearest source of present supply.

As the direct result of an arrangement made by the Provincial Government of Manitoba with the Canadian Pacific Railway, extensive operations in these fields will take place during the ensuing year, the Company contracting to supply all demands for coal at a fixed rate, viz., \$1.75 on car at the mines, and at the same rate, freight added, to all parts of the Province. The price at Winnipeg will be \$4.00 per ton on car, and at Brandon \$3.50.

While there is an ample supply of wood at present in nearly all parts of Manitoba to meet all demands for fuel, still it is satisfactory to know that the fuel question for the future is solved beyond a doubt in the developing of the mines last mentioned.

I have the honour to be, Sir,

Your obedient servant,

E. F. STEPHENSON,

*Crown Timber Agent.*

A. M. BURGESS, Esq.,

Deputy of the Minister of the Interior,  
Ottawa.



## SCHEDULE A.

STATEMENT of Receipts from Crown Timber Agent, Winnipeg, for Year ending the 31st October, 1891.

Month.	Bonus.	Ground Rent.	Royalty.	Permits.	Seizures, Dues and Fines for Trespass.	Dues on Timber Cut on School Lands.	Dues on Hay Cut on School Lands.	Dues on Stone Quarried.	Coal Mines.	Hay Illegally Cut on Dominion Lands.	Totals.	
	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.
1890.												
November..		100 00		476 14	229 45	34 85	52 00			42 90	935 34	
December..		84 42	507 79	1,162 04	124 72	42 50	17 25	9 00	1 00	56 65	2,005 37	
1891.												
January.....			169 69	1,674 69	159 91	28 50				4 40	2,037 19	
February.....		52 50		1,834 63	132 46	44 36	25 15	10 00		31 10	2,130 20	
March.....		10 00	47 62	1,542 33	285 47	82 75	7 50			5 50	1,981 17	
April.....		770 26	238 94	1,062 14	439 67	22 15	55 00			4 00	2,392 16	
May.....			219 01	813 59	165 11	0 25	5 20		12 00		1,215 16	
June.....		803 20	1,020 92	1,122 66	36 70		4 90			25 90	3,014 28	
July.....		250 00	582 55	1,146 49	8 75					3 40	1,991 19	
August.....			942 41	630 09	123 83		2 00				1,698 33	
September.....		340 14	591 16	804 89	55 14	9 25			1 50		1,802 08	
October.....		1,282 49	5,061 00	2,580 54	876 94	1 30		25 05		12 10	9,839 42	
Collections at Head Office.....		3,693 01	9,381 09	14,850 23	2,638 15	265 91	169 00	44 05	14 50	185 95	31,241 89	
		596 40	1,049 58			12 00					3,613 73	
Totals.....	1,955 75		10,430 67	14,850 23	2,638 15	277 91	169 00	44 05	14 50	185 95	34,855 62	

E. F. STEPHENSON,  
Crown Timber Agent.CROWN TIMBER OFFICE,  
WINNIPEG, 22nd February, 1892.

SCHEDULE B.—Showing the Number of Saw-Mills in the Province of Manitoba and District of Assiniboia operating under Government License, for the Year ending 31st October, 1891.

Name of Owner or Owner and Assignee.	Limit, Where Situated.	Kind of Power.	Horse Power.	Capacity per 12 hours.	Commenced operations.	Description of Timber.	Location of Limits.
1. Alex. Cameron.	Minnedosa.	Steam.	25	6,000	1878	Spruce and tamarack.	Riding Mountain.
2. James Jermyon.	do	do	50	15,000	1880	do	do
3. Sigfr. Jonasson.	Bad Throat River.	do	40	12,000	1886	do	Lake Winnipeg.
4. Bucknall Bros.	Millwood.	do	75	30,000	1885	do	Little Boggy Creek.
5. W. H. Whimstor.	Strathclair.	do	25	6,000	1880	do	Riding Mountain.
6. Federal Bank of Canada.	Ebb and Flow Lake.	do	75	20,000	1883	do	Lake Winnipeg.
7. David McFadyen.	Eden.	do	16	3,000	1884	do	Riding Mountain.
8. Daniel Spague.	Winnipeg.	do	75	25,000	1882	Red and white pine.	Roseau River.
9. David Ross.	Whitemouth.	do	35	10,000	1880	Spruce and tamarack.	Whitemouth River.
10. Brown, Rutherford & Co.	Fisher Bay.	do	30	10,000	1884	do	Lake Winnipeg.
11. Selkirk Lumber Co.	Fisher River.	do	75	30,000	1880	do	do
12. Miller & Patton.	Sird Tail Creek.	do	50	20,000	1880	do	Riding Mountain.
13. George Morton.	Bossevain.	do	40	12,000	1882	Poplar and oak.	Turtle Mountain.
14. Alfred Wells.	Balmoral.	do	16	3,000	1884	Spruce and tamarack.	Grindstone Point.
15. Imperial Bank.	Brandon.	do	80	35,000	1889	do	Townships 20 and 21, Range 21 W.
16. C. A. Brouse & Co.	Bad Throat River.	Water.	20	7,000	1879	do	Lake Winnipeg.
17. Assissippi Manufacturing Co.	Shell River.	do	20	5,000	1889	do	Shell River.
18. Drake & Co.	Black Island.	Steam.	16	3,000	1889	do	Black Island.
19. Shaw Bros.	Valley River.	do	75	20,000	1890	do	Lake Dauphin.
20. George Kerr.	Franklin.	do	16	3,000	1891	do	Riding Mountain.
21. Peter McArthur.	Fairford River.	do	35	12,000	1889	do	Lake Manitoba.

[PART 1]

SCHEDULE B.—Showing the Number of Saw-Mills, &c., for the Year ending 31st October, 1891—*Concluded*.

	Ft. B. M.	Quantity of Lumber manufactured for Year ending 31st October, 1891.	Quantity of Lumber sold from amount manu- factured in 1891, and on hand 31st October,	Ft. B. M.	Quantity of Lumber on hand, 31st October, 1891.	Quantity of Shingles manufactured for Year ending 31st October, 1891.	Quantity of Shingles sold from amount manu- factured in 1891, and on hand 31st October,	No.	Quantity of Shingles on hand, 31st October, 1891.	Quantity of Laths manu- factured for Year end- ing 31st October, 1891.	Quantity of Laths sold from amount manu- factured in 1891, and on hand 31st October, 1890.	Quantity of Laths on hand 31st October, 1891.	Remarks.
1	588,567	11,160	7,350										
2	1,670,611	588,567	128,000	720,000	190,250	529,750	2,850						125 railway ties on hand.
3	1,109,160	1,658,611	831,587	459,000	229,750	303,500							2,350 301 ship knees on hand.
4	914,688	1,390,511	662,072	285,250	189,250	120,000							6,100 279 cords slabs, and 2,552 railway ties on hand.
5	1,047,475	730,716											
6	228,000	1,322,475		170,000									
7	1,200,000	228,000											430 poles on hand.
8	300,000	702,979	1,164,306										1,234 cords slabs on hand.
9	800,000	953,049	334,451										
10		600,000	1,350,000										
11		421,039	315,968										
12	4,781,483	2,500,333	2,503,689	112,000	91,500	20,500							3,175 cords slabs on hand ; 91,477 railway ties on hand.
13	127,000	103,415	58,834	80,000	57,750	46,250							About 5,000 feet culls on hand.
14	394,793	394,793											500 cords slabs on hand.
15	990,220	990,220											50,000 of shingles on hand are culls.
16	53,548	83,548		960,000	810,000	150,000							
17	3,759	3,759											See return sent H. O., 8th September, 1891.
18	516,490	391,990	124,500										4,944 railway ties on hand.
19													
20	84,000	70,500	13,500	225,000	225,000								
21	1,324,274	824,132	500,142										
	16,134,008	14,169,797	7,938,399	3,011,250	1,963,500	1,170,000	315,250	353,700	8,450				

E. F. STEPHENSON,  
*Crown Timber Agent.*CROWN TIMBER OFFICE,  
WINNIPEG, 22nd February, 1892.



SCHEDULE C.

GENERAL Office Return for the Twelve Months ending 31st October, 1891.

Description of Return.	Number.	Compared with last year.		Remarks.
		Increase.	Decrease.	
Number of letters written and circulars...	{ Letters, 7,058 Circulars, 4,000 }	.....	.....	Including Dominion Lands Office. do
do do received .....	{ Letters, 6,469 Circulars, 324 }	.....	.....	
do free permits issued.....	1,249	636		
do permits issued, subject to dues..	1,597		772	
do seizures made .....	{ Hay, 83 Timber, 364 }	.....	411	
do mill returns received and verified	57	27		

E. F. STEPHENSON,  
*Crown Timber Agent.*

CROWN TIMBER OFFICE,  
WINNIPEG, 22nd February, 1892.

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DEPARTMENT OF THE INTERIOR,  
CROWN TIMBER OFFICE, EDMONTON, 31st October, 1891.

SIR,—I have the honour to enclose annual statements of my office, from which you will see a very considerable increase both in the number of permits granted, and the amount of receipts. The increase of the former is greater by 159 than last year's issue, being 286 as compared with 127.

The amount of receipts for permits shows even a greater improvement, being \$3,913.19, as compared with \$512.72 last year.

The expenses in working the office, even with the increased business, shows a decrease of \$88.06 as compared with last year.

Now that we have the railroad from Calgary, large numbers of settlers and prospectors for land have come in, and all, without an exception, have expressed themselves as well pleased with the good harvest and splendid weather, and have left to bring in their friends, so that next year we will have a very large immigration, and will have to be prepared to meet it.

Lumber of all kinds is now in such demand that the stocks on hand at the mills will not meet it.

I have great pleasure in congratulating you on this marked improvement, as I feel sure it is only the beginning of an immense immigration.

I have the honour to be, Sir,

Your obedient servant,

THOS. ANDERSON.

*Crown Timber Agent.*

A. M. BURGESS, Esq.,  
Deputy Minister of the Interior,  
Ottawa.

SCHEDULE A.  
STATEMENT of Receipts on account of Crown Timber, &c., for the Year ending the 31st October, 1891.

Month.	Bonus.	Ground Rent.	Royalty.	Permits.	Seizures, Dues and Fines for Trespass.	Refunded Disbursements.	Hay Land.	School Land.	Total at Edmonton.	Total at Head Office.	Totals.
1890.	% cts.	% cts.	% cts.	% cts.	% cts.	% cts.	% cts.	% cts.	% cts.	% cts.	% cts.
November.....	.....	.....	105 27	5 55	.....	.....	392 57	.....	503 39	.....	503 39
December.....	.....	.....	.....	70 81	28 00	.....	.....	.....	98 81	.....	98 81
1891.											
January.....	.....	250 00	142 39	42 61	25 68	.....	.....	.....	460 68	.....	460 68
February.....	.....	.....	.....	2,302 85	.....	.....	.....	.....	2,302 85	.....	2,302 85
March.....	.....	122 50	.....	1,141 48	20 00	.....	.....	36 50	1,320 48	.....	1,320 48
April.....	.....	.....	58 54	43 20	.....	.....	.....	.....	101 74	.....	101 74
May.....	.....	.....	27 77	23 82	.....	62 25	.....	.....	113 84	.....	113 84
June.....	.....	.....	.....	77 54	4 26	3 00	.....	.....	84 80	264 26	349 06
July.....	.....	.....	339 81	52 55	.....	1 50	.....	.....	393 86	.....	393 86
August.....	.....	230 00	.....	24 78	154 46	43 88	.....	.....	453 12	.....	453 12
September.....	.....	.....	.....	102 50	2 50	6 80	.....	.....	111 80	.....	111 80
October.....	.....	.....	312 67	25 50	20 00	.....	.....	.....	358 17	.....	358 17
Collected at Head Office.....	.....	602 50 264 26	986 45	3,913 19	254 90	117 43	392 57	36 50	6,303 54	264 26	6,567 80
Totals.....	.....	866 76	986 45	3,913 19	254 90	117 43	392 57	36 50			

THOMAS ANDERSON,  
*Crown Timber Agent.*

CROWN TIMBER OFFICE,  
EDMONTON, 31st October, 1891.



SCHEDULE B.

Showing the Saw Mills in the Edmonton Crown Timber Agency, operating under Government License, during the Year ending 31st October, 1891.

No.	Name of Owner or Owner and Assignee.	Where Mill Situated.	Kind of Power.	Horse Power.	Capacity for 12 Hours.	Commenced operations.	Description of Timber.	Location of Limits.	Lumber.		Shingles.		Laths.		Remarks.
									Manu- factured.	Sold.	Manu- factured.	Sold.	Man- ufac- tured.	Sold.	
1	Moore & Macdowall.	White Mud River	Steam..	40	10,000	1885	Spruce	White Mud River	Feet. .....	540,671	15,000	277,000	.....	60,100	Last return, Sept. 30, 1891.
2	Frazer & Co. ....	Edmonton..	do ..	30	10,000	1880	do ..	South side N.S.R.	744,499	302,651	56,000	56,000	.....	..	do
3	Lamoureux Bros. ....	Stony Plain.....	do ..	20	5,000	1883	do ..	Stony Plain.....	232,210	140,019	170,000	151,333	.....	..	do
4	St. Albert Mission..	St. Albert.....	Water..	20	5,000	1883	do ..	Egg Lake.. ....	.....	.....	.....	.....	.....	.....	No timber cut.
	Total .....	.....	.....	.....	.....	.....	.....	.....	976,709	983,341	241,000	484,333	.....	60,100	

No. 2. This firm is cutting on land licensed to the Hudson's Bay Company.  
No. 4. Mill burned down. Not rebuilt.

CROWN TIMBER OFFICE,  
EDMONTON, 31st October, 1891.

THOMAS ANDERSON,  
*Crown Timber Agent.*

## SCHEDULE C.

GENERAL OFFICE Return for the Twelve Months ending the 31st October, 1891.

Description of Return.	Number.	Compared with previous year.	
		Increase.	Decrease.
Number of letters written.....	529	.....	186
do do received.....	280	..... 7	
do free permits issued.....	222	} 159	
do permits subject to dues issued.....	64		
do seizures made.....	1	.....	3
do mill returns received.....	13	..... 1	

CROWN TIMBER OFFICE,  
EDMONTON, 31st October, 1891.THOMAS ANDERSON,  
*Crown Timber Agent.*CROWN TIMBER OFFICE,  
PRINCE ALBERT, 11th November, 1891.

SIR,—I have the honour to enclose herewith my annual report of the business transacted within this district during the year ending the 31st October last, comprising the following schedules, namely:—

(A.) Statement of revenue derived from timber dues and other sources.

(B.) Statement of mills operating under Government licenses and permits within the district, and showing the quantities of material manufactured, sold and on hand by those operating under license.

(C.) Containing other information respecting the work of the office.

All of which is respectfully submitted.

I have the honour to be, Sir,

Your obedient servant,

JOHN McTAGGART,  
*Crown Timber Agent.*

The Secretary,  
Department of the Interior, Ottawa.

SCHEDULE A.  
STATEMENT of Receipts on account of Crown Timber for the Year ending 31st October, 1891.

Month.	Bonus. \$ cts.	Ground Rent. \$ cts.	Permit Dues. \$ cts.	Royalty. \$ cts.	Seizures, Dues and Fines for Trespass. \$ cts.	Total at Prince Albert. \$ cts.	Total at Head Office. \$ cts.	Total.
1890.								
November.....			531 81		196 69	757 69	3,000 00	3,757 69
December.....			29 19*		37 80	367 09		367 09
			276 94		5 50*			
			46 85*					
1891.								
January.....			231 55		3 87	359 27		359 27
February.....			123 85*					
			42 25			257 96		257 96
March.....			215 71*					
			44 35			150 35		150 35
April.....			106 00*					
			239 44			297 12	115 00	412 12
May.....			57 68*					
			96 28			115 98		115 98
June.....			19 70*					
			150 57		2 00	160 32		160 32
July.....			1 75*		6 00*			
			25 70			54 05		54 05
August.....			14 15*		14 20*			
			382 47		28 00	416 39		416 39
September.....			5 92*					
			34 77		26 10	65 37		65 37
October.....			4 50*					
			6 25			8 25		8 25
			2 00*					
Collected at Head Office.....	115 00	3,000 00	2,689 68		320 16	3,009 84	3,115 00	6,124 84
Totals .....	115 00	3,000 00	2,689 68		320 16			

\* Collected at Battleford.

CROWN TIMBER OFFICE,  
PRINCE ALBERT, 31st October, 1891.

JOHN McTAGGART,  
Crown Timber Agent.



SCHEDULE B.  
Showing the Saw Mills in the Prince Albert Crown Timber Agency operating under Government License, during the Year ending the 31st October, 1891.

Number.	Name of Owner or Assignee.	Where Mill situated.	Kind of Power.	Horse Power.	Capacity per 12 hours.	Commenced operations.	Description of Timber.	Location of Limits.	LUMBER.		SHINGLES.		LATHS.		Date of last Mill Return for Office.
									Mann- factured	Sold.	Mann- factured	Sold.	Mann- factured	Sold.	
1	Moore & Macdowall.	Prince Albert.	Steam	75	35,000	1876	Spruce, pine and poplar.	N. of North Saskatchewan River.	761,423	912,578	456,000	469,333	167,100	57,000	Oct. 31, '91.
2	James Sanderson	do	do	25	5,000	1890	do	do	.....	.....	.....	.....	.....	.....	*
3	Shannon & Mack	do	do	20	2,000	1891	do	do	.....	.....	.....	.....	.....	.....	+
									761,423	912,578	456,000	469,333	167,100	57,000	

\* Cutting under permit. + Cutting under permit. C 113, McGhee.

JOHN McTAGGART,  
*Crown Timber Agent.*

CROWN TIMBER OFFICE,  
PRINCE ALBERT, 31st October, 1891.

## SCHEDULE C.

GENERAL OFFICE Return for the Twelve Months ending the 31st October, 1891.

Description of Return.	Number.	Compared with Last Year.	
		Increase.	Decrease.
Number of permits subject to dues issued, Prince Albert.....	149	163	
do free permits issued, Prince Albert.....	52		
do permits subject to dues issued, Battleford.....	78		
do free permits issued, Battleford.....	14		
do mill returns received.....	3	.....	25
do seizures made—Battleford, 6; Prince Albert, 11.....	17	.....	

CROWN TIMBER OFFICE,  
PRINCE ALBERT, 31st October, 1891.

JOHN McTAGGART,  
*Crown Timber Agent.*

NEW WESTMINSTER, B.C., 1st November, 1891.

SIR,—I have the honour to enclose statement of timber matters in my agency for the past departmental year. I am pleased to be able to say that the general depression existing in the lumber trade on the American side of the Pacific Coast has not affected our trade, as will be seen by my cash statement, the receipts for the past year being \$45,944.31, an increase over the previous year of \$509.22. We can, therefore, with a revival in business in Australia, and settlement of disturbances in Chili, two of our most important markets, confidently look forward to a bright future for our lumber trade, even pending the establishment of our line of fast sailing steamships to the first named country which will doubtless materially increase our lumber as well as other branches of business. In the meantime the mills in the interior are doing a profitable business, the lumber finding a ready market on the prairies at good paying prices, and with the largely increasing immigration flowing into Manitoba and the North-West Territories they have every reason to look forward to a greatly increased and lucrative business.

I have the honour to be, Sir,

Your obedient servant,

T. S. HIGGINSON,

*Dominion Crown Timber Agent for British Columbia.*

A. M. BURGESS, Esq.,  
Deputy Minister of the Interior,  
Ottawa.

SCHEDULE A.

STATEMENT of Receipts on Account of Crown Timber, for the Twelve Months ending the 31st October, 1891.

Month.	Bonus.	Ground Rent.	Royalty.	Permit Dues.	Seizures, Dues and Fines for Trespass.	Miscellaneous.	Total, New Westminster.	Total, Head Office.	Totals.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1890.									
November.			120 10		52 50		172 60	941 00	1,113 60
December.		53 68	602 46				636 14	10,386 15	11,042 29
1891.									
January.				3,911 01				1,347 04	1,347 04
February.								50 00	3,961 01
March.								2,024 23	2,024 23
April.								4,148 52	4,148 52
May.		100 88	310 48	3,172 30			3,583 66	1,130 21	4,713 87
June.			491 37	29 00			520 97	46 09	567 06
July.		558 97	4,053 30		11 43		4,623 70		4,623 70
August.		58 81	316 78	1,050 98			1,436 57	10 00	1,436 57
September.		635 23	978 01				1,673 24	139 04	1,812 28
October.		58 32	2,378 90	5,061 25			7,554 80	1,649 34	9,204 14
Amounts collected at Head Office.		1,525 89 2,245 85	9,252 00 350 75	13,224 54	118 26	2 00	24,122 69	21,871 62	
Totals.	19,275 02								
Grand Total.	19,275 02	3,771 74	9,602 75	13,224 54	118 26	2 00			45,994 31

CROWN TIMBER OFFICE,  
NEW WESTMINSTER, B.C., 31st October, 1891.

T. S. HIGGINSON,  
Dominion Crown Timber Agent for British Columbia.



## SCHEDULE B.

Showing the Saw Mills in the Railway Belt in the Province of British Columbia, operating under Government License, for the Year ending 31st October, 1891.

Number.	Name of Owner or Owner and Assignee.	Where Mill situated.	Kind of Power.	Capacity per 12 hours.	Description of Timber.	Location of Limits.	Quantity of Timber Cut during the Year ending 31st October, 1891.	Date of last Mill Return forwarded to Head Office.	Remarks.
1	Royal City Planing Mills Co. . . . .	New Westminster.	Steam.	Feet. 100,000	Douglas pine, red cedar, spruce, alder, maple, yew.	New Westminster District.	Feet B. M. 12,549,070	Sept. 30, '91.	
2	Columbia River Lumber Co. . . . .	Beaver. . . . .	do	75,000	do	Beaver River. . . . .	6,657,704	do 30, '91.	
3	Brunette Saw Mill Co. . . . .	New Westminster.	do	100,000	do	New Westminster District.	211,186	do 30, '91.	
4	McLaren-Ross Lumber Co. . . . .	do	do	200,000	do	do	4,197,574	July 1, '91.	No timber cut, except 10,119 railway ties.
5	H. V. Edmonds. . . . .	Port Moody. . . . .	do	25,000	do	do	.....	Sept. 30, '91.	
6	Knight Bros. . . . .	Popeum. . . . .	Water.	30,000	do	do	177,250	do 30, '91.	
7	Henry West. . . . .	Langley. . . . .	Steam.	15,000	do	do	348,832	do 30, '91.	
8	Shuswap Milling Co. . . . .	Kamloops. . . . .	do	20,000	do	Spallumcheen. . . . .	.....	do 30, '91.	No timber cut.
9	Palliser Lumber Co. . . . .	Palliser. . . . .	do	25,000	do	Palliser. . . . .	1,423,900	do 30, '91.	
10	Stein & Robinson. . . . .	Revelstoke. . . . .	do	15,000	do	Revelstoke. . . . .	905,893	do 30, '91.	500,000 shingles were cut.
11	Ottertail Lumber Co. . . . .	Ottertail. . . . .	do	15,000	do	Ottertail. . . . .	1,030,000	do 30, '91.	20,000 shingles were cut.
12	Grant & Kerr. . . . .	Ladner's Landing. . . . .	do	15,000	do	New Westminster District.	1,577,336	do 30, '91.	
13	Genelle Bros. . . . .	Tappin Siding. . . . .	do	25,000	do	Tappin Siding. . . . .	1,428,694	do 30, '91.	
14	Huntingdon Lumber Co. . . . .	Huntingdon. . . . .	do	15,000	do	New Westminster District.	.....	do 30, '91.	No timber cut.
						Total. . . . .	30,507,439		

T. S. HIGGINSON,  
*Dominion Crown Timber Agent for British Columbia.*

CROWN TIMBER OFFICE,  
NEW WESTMINSTER, 31st October, 1891.

SCHEDULE C.

GENERAL OFFICE Return for Twelve Months ending the 31st October, 1891.

Description of Return.	Number.	Compared with Previous Year.	
		Increase.	Decrease.
Number of letters written. . . . .	635		
do do received. . . . .	830		
do timber permits issued. . . . .	2		
do mill returns received . . . . .	40		

T. S. HIGGINSON,  
*Dominion Crown Timber Agent for British Columbia.*

CROWN TIMBER OFFICE,  
NEW WESTMINSTER, 31st October, 1891.

SCHEDULE A.

STATEMENT of Receipts on account of Crown Timber, &c., at Calgary, for the Year ending the 31st October, 1891.

Month.	Bonus.	Ground Rent.	Royalty.	Permits.	Seizures, Dues and Fines for Trespass.	Total at Calgary.	Total at Head Office.	Totals.
1890.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
November. . . . .				6 25		6 25		6 25
December . . . . .				9 00		9 00	1,166 02	1,175 02
1891.								
January . . . . .				28 63		28 63		28 63
February. . . . .		17 05		6 75		23 80	251 75	275 55
March . . . . .				7 70		7 70	88 34	96 04
April . . . . .			372 75	1 00		373 75		373 75
May . . . . .		1,102 60		14 60	8 00	1,125 20	257 60	1,382 80
June . . . . .		298 72	836 28	2 00		1,137 00		1,137 00
July . . . . .		164 99	1,049 83	2 91		1,217 73		1,217 73
August. . . . .		0 43		3,494 66		3,495 09		3,495 09
September . . . . .				2 25	24 30	26 55	1,000 00	1,026 55
October. . . . .			22 50	2 50		25 00	1,666 63	1,691 63
		1,583 79	2,281 36	3,578 25	32 30	7,475 70	4,430 34	11,906 04
Collected at Head Office. . . . .	1,000 00	837 69	1,631 63	961 02				
	1,000 00	2,421 48	3,912 99	4,539 27	32 30			

CROWN TIMBER OFFICE;  
CALGARY, 31st October, 1891.

AMOS ROWE.  
*Crown Timber Agent.*

[PART I]

## SCHEDULE B.

SHOWING the Saw Mills in the Calgary Crown Timber Agency, operating under Government License, during the Year ending 31st October, 1891.

Number.	Name of Owner or Assignee.	Where Situated.	Kind of Power.	Capacity per 12 hours.	Commenced operations.	Description of Timber.	Location of Limits.	LUMBER.		SHINGLES.		LATHS.		Date of last Return forwarded to Head Office.
								Manu- factured	Sold.	Manu- factured	Sold.	Manu- factured	Sold.	
				Feet.					Feet.					
1	Peter McLaren.....	Mill Creek....	Water	20	5,000	1882	Spruce, Red Fir and Pine.....		258,104	183,250	162,250	3,000	3,000	31 Oct., '91
2	Peter McLaren..	Fort McLeod.	Steam	25	10,000	1888	South Fork, Old Man River....	909,351	659,527	29,250	53,800	11,250	10,400	do
3	James Walker .....	Kananaskis....	"	60	15,000	1887	Spruce, Pine and Cypress.....							
4*	Calgary Lumber Co.	Cochrane .....	"	75	20,000	1885	Spruce and Fir.....	879,813	471,780		10,000	40,000	20,000	30 June, '91
5	Eau Claire and Bow River Lumber Co.	Calgary .....	"	75	25,000	1887	Fir, Spruce and Douglas Pine....							30 Sept., '91
6	Louis Sands.....	Cypress Hills.	"	30	18,000		Pine and Spruce....							
7	North-Western Coal and Navigation Co.	Lethbridge...	"	20	5,000	1885	Spruce .....	781,433	2,038,958			357,000	684,650	1 July, '91
8	D. Morrison.....	Sheep Creek..	"				South Fork, Old Man River....							do
							In Tp. 21 R. 4 and 5 W. 4.							do
9	Alberta Lumber Co.	Red Deer. ....	"		1891		Red Deer River....	372,000	171,523	190,000	162,250			do
10	John Linham .....				1891		Sheep Creek .....	950,250	548,967	166,250	122,750	73,750	11,350	do
								4,150,951	4,176,085	568,750	511,050	485,000	729,400	

\* 11,802 railway ties were cut on limit as shown in mill returns, 31st March and 30th June, 1891.

AMOS ROWE,  
Crown Timber Agent.

CROWN TIMBER OFFICE,  
CALGARY, 3rd November, 1891.



## SCHEDULE C.

GENERAL OFFICE Return for the Twelve Months ending the 31st October, 1891.

Description of Return.	Number.	Remarks.
Number or letters written.....	350	
do do received.....	568	
do permits subject to dues issued.....	16	
do free permits issued.....	178	
do mill returns received.....	28	

AMOS ROWE,  
*Crown Timber Agent.*CROWN TIMBER OFFICE,  
CALGARY, 31st October, 1891.

## No. 5.

## ORDNANCE AND ADMIRALTY LANDS.

## ORDNANCE AND ADMIRALTY LANDS BRANCH.

OTTAWA, 31st December, 1891.

SIR,—I have the honour to submit a report of the transactions in connection with the Ordnance and Admiralty Lands Branch of the Department of the Interior, for the fiscal year ended 30th June, 1891.

The schedules (3) annexed, marked respectively A, B and C, exhibit in a summarized form the receipts for the year, and the several localities of the properties from the sales or rentals of which the revenue was derived.

(A.)—Statement of sales. Total amount, \$12,769.83.

The following properties were disposed of during the year:—

(1.) At Grand Falls, in the County of Victoria, New Brunswick, 10 lots, comprising an area of 76 acres, were sold for \$360 (average per acre, \$4.74), of which sum \$90, being one-fourth of the purchase money, was paid down at time of sale.

(2.) At the same place, a mill site, comprising 7 acres of land, and water power, was sold for \$1,161 cash. This sale was held at the office of Mr. Bertram Currier, Ordnance Lands Agent, on the 25th of August, and was superintended by me.

(3.) At Edmundston, in the County of Madawaska, New Brunswick, 28 lots, comprising an area of 12a., 1r. and 32p. were sold for \$4,789 (average per acre, \$384.66), of which sum \$2,693.50 has been paid.

(4.) In the city of Kingston, Ontario,  $4\frac{1}{2}$  lots, forming part of the Herchmer Farm property, comprising an area of 2 acres, were sold for \$2,100 (average per acre \$1,050). At the same time a small piece of land situate at the corner of Barrack and Bagot streets, containing 2,347 superficial feet, was sold for \$700.00 (at the rate of  $29\frac{1}{2}$  cents per foot). In each case the first instalment, one-fifth of the purchase money, amounting together to \$560, was paid down at time of sale. This sale was held at the rooms of Mr. William Murray, auctioneer, on the 29th of July, and was superintended by me.

(5.) At Jones' Falls, 5 sub-lots, forming part of Lot 5 in the 6th Concession of the Township of South Crosby, comprising an area of 2a., 3r. and 15p., were sold for \$156 (average per acre, \$54.85), of which amount \$87.20 was paid down.

(6.) At the same time sub-lot 10 of Lot 25 in the 8th Concession of the Township of Pittsburg, area 1.53 acres, was sold for \$30, on account of which \$6 was paid. These sales were held on the 6th of August, and were conducted by me.

(7.) In the Township of Nepean, a small piece of land of an irregular shape, forming part of Lot K in Concession C, containing  $\frac{6.7}{100}$  of an acre, was sold, under authority of an Order in Council, to Thos. F. Wallace, for the sum of \$75 cash.

(8.) In the Township of Vespra, Lot 13 in the 11th Concession, containing 200 acres, was sold for \$500 (\$2.50 per acre), of which sum \$125, being one-fourth of the purchase money, was paid down at the time of sale.

(9.) At Ottawa city,  $13\frac{3}{4}$  ordinary town lots, formerly held under lease, have, by the payment of \$2,898.83 made by the respective lessees, been converted into freehold, in accordance with the terms and conditions contained in the original leases granted by the Principal Officers of Her Majesty's Ordnance.

(B.)—Statement showing the several localities of Ordnance properties on account of which moneys have been received.

In the month of December, 1875, part of the Hochelaga Barracks was destroyed by fire, entailing a loss estimated by Mr. John W. Hopkins, of Montreal, at \$21,925. At that time the property was held under lease by Mr. Duncan McDonald, who was bound by the terms of the lease granted to him to keep the whole of the said barrack property insured in favour of the Dominion Government in the sum of \$24,000. It appears, however, that at the time of the fire the property was not insured. Sub-

sequently proceedings were taken against him for the recovery of damages, and on the 19th of December, 1878, judgment was given in the Supreme Court of Lower Canada, in favour of the Crown for \$10,462.50, being the value placed by the court upon the buildings destroyed. In the month of December last the sum mentioned, with the addition of \$8,824.19 on account of interest accrued from the 26th of November, 1876, to date, and \$128.95 on account of costs, making together \$19,415.64, was paid, as shown in statement B.

(C.)—Statement of amounts received (monthly) during the fiscal year. Total receipts, \$54,229.69, being \$24,308.08 in excess of the receipts of the preceding fiscal year.

Since the 1st of July, sales have been made of Ordnance lands situated in the city of Montreal, and at Chambly, Quebec; at Amherstburg, Ont., and at Grand Falls, New Brunswick, the prices realized being very satisfactory. The particulars of these sales will appear in the report of the transactions of this branch for the current fiscal year.

The lease of the Government Farm at Longueuil having expired on the 1st of November, 1890, it was decided to invite tenders, by advertisement, for the lease thereof for a term of 5 years, upon certain conditions. In answer to the advertisement four tenders were received, the offer of \$750 per annum made by Mr. G. W. Parent, of the city of Montreal, being accepted by the Department—the lease to date from the 1st of June, 1891, and the rent to be payable in advance. The farm comprises an area of 190 acres, and was rented to the late lessee at \$525 per annum.

In pursuance of the instructions received by me, and in accordance with an Order in Council (P. C. No. 1650) approved by His Excellency the Governor General on the 5th July, 1890, authorizing me to visit Point Pelee, on Lake Erie, in the County of Essex, for the purpose of investigating the claims of the several squatters on the Naval Reserve of that place, I visited the said reserve in the month of October following, and inspected the squatters' holdings, and the portion of land remaining unoccupied and unimproved. I was afterwards engaged for several days at Leamington in examining the parties interested and the papers produced by them in support of their respective claims to the portions of land which they and their fathers before them have been allowed to occupy continuously for many years, merely upon sufferance, and without payment of rent. The total area which has been allotted to these squatters is 523½ acres, as shown on the plan of survey made by G. McPhillips, D. L.S., dated Windsor, Ont., 30th July, 1889. The proportionate cost attending this, and a previous survey of the squatters' holdings, is estimated at \$840.91—an average of \$1.60½ per acre—to cover which and other incidental expenses it has been decided to fix the price at \$1.70 per acre. On payment of the full amount, in accordance with this rate, the several parties whose claims to special consideration have been established to the satisfaction of the Department will be granted letters patent giving them a title in fee simple to the portion or portions of land at present occupied by them as squatters only.

During the year 466 letters were received, 907 letters written (including a number of lengthy reports), and upwards of 500 notices and statements of account prepared and forwarded to tenants and purchasers in arrears; 24 assignments were registered; 42 drafts of letters patent prepared; and 109 warrants issued for the Bank of Montreal at Ottawa to receive moneys. In addition to these about 1,000 accounts open with the respective purchasers and tenants of Ordnance lands situated in the Provinces of Ontario, Quebec, Nova Scotia and New Brunswick, have been carefully kept in this office.

I have the honour to be, Sir,

Your obedient servant,

WILLIAM MILLS,

*In charge of Ordnance and Admiralty Lands.*

A. M. BURGESS, Esq.,

Deputy of the Minister of the Interior.

[PART I]

49



A.

STATEMENT of Sales made during the Fiscal Year ended 30th June, 1891.

Locality.	Number of Lots Sold or Redeemed.	Amount Sold for.	Amount Received on Account.
		\$ cts.	\$ cts.
Crosby, South.....	5 lots (2a. 3r. 15p.).....	156 00	87 20
Edmundston, N.B.....	28 lots.....	4,789 00	2,693 50
Grand Falls.....	10 lots (76 acres).....	360 00	90 00
do.....	7 acres and water privilege.....	1,161 00	1,161 00
Kingston.....	5½ lots.....	2,800 00	560 00
Nepean.....	13½ acre.....	75 00	75 00
Ottawa.....	13½ lots redeemed.....	2,898 83	2,898 83
Pittsburg.....	1 lot.....	30 00	6 00
Vespra.....	200 acres.....	500 00	125 00
	Total.....	12,769 83	7,696 53

WILLIAM MILLS,

*In charge of Ordnance and Admiralty Lands.*

DEPARTMENT OF THE INTERIOR,  
ORDNANCE AND ADMIRALTY LANDS,  
OTTAWA, 31st December, 1891.

B.

STATEMENT showing the several Localities on account of which Moneys have been received during the Fiscal Year ended 30th June, 1891.

Locality.	Amount.	Locality.	Amount.
	\$ cts.		\$ cts.
		Brought forward.....	44,830 61
Amherstburg.....	187 90	Niagara.....	121 92
Burlington Beach.....	120 00	Niagara Falls.....	100 00
Chambly.....	700 00	Oxford.....	1 60
Crosby, South.....	87 20	Ottawa.....	6,531 12
Chatham, Que.....	765 00	Pittsburg.....	6 00
Elmsley.....	9 70	Prescott.....	908 61
Edmundston, N.B.....	2,693 50	Point Pelee.....	400 00
Fort Erie.....	41 00	Quebec.....	345 00
Grand Falls, N.B.....	1,385 71	Sorel.....	664 03
Hochelaga.....	19,415 64	Sarnia.....	40 00
Kingston.....	3,220 34	South River.....	25 00
Longueuil.....	1,075 00	St. Mary's Island.....	40 00
Montreal.....	15,052 87	Vespra.....	125 00
Nova Scotia.....	1 00	Wolford.....	38 80
New Brunswick.....	0 75	Office fees.....	52 00
Nepean.....	75 00		
Carried forward.....	44,830 61	Total.....	54,229 69

WILLIAM MILLS,

*In charge of Ordnance and Admiralty Lands.*

DEPARTMENT OF THE INTERIOR,  
ORDNANCE AND ADMIRALTY LANDS,  
OTTAWA, 31st December, 1891.

## C.

## STATEMENT of Receipts on account of Ordnance and Admiralty Lands for the Fiscal Year ended 30th June, 1891.

Date.	Registration Fees.	Rent or Interest.	Principal.	Total.
1890.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
July . . . . .	10 00	2,098 80	5,790 61	7,899 41
August . . . . .	8 00	1,273 11	5,650 40	6,931 51
September . . . . .		237 08	2,065 90	2,302 98
October . . . . .		1,261 09	1,678 40	2,939 49
November . . . . .	8 00	599 31	632 50	1,239 81
December . . . . .	2 00	9,097 91	11,465 90	20,565 81
1891.				
January . . . . .		156 25	811 75	968 00
February . . . . .	22 00	641 25	100 00	763 25
March . . . . .		184 67	200 00	384 67
April . . . . .	2 00	738 52	1,286 12	2,026 64
May . . . . .		1,407 48		1,407 48
June . . . . .		1,230 53	5,570 11	6,800 64
Totals . . . . .	52 00	18,926 00	35,251 69	54,229 69

WILLIAM MILLS,

*In charge of Ordnance and Admiralty Lands.*

DEPARTMENT OF THE INTERIOR,  
ORDNANCE AND ADMIRALTY LANDS,  
OTTAWA, 31st December, 1891.

## No. 6.

## ACCOUNTANT'S BRANCH.

DEPARTMENT OF THE INTERIOR,  
ACCOUNTANT'S BRANCH,  
OTTAWA, 29th February, 1892.

SIR,—I have the honour to submit the following report, referring to the accounts of this Department, for the year ending 31st October, 1891.

During the past few years the Auditor General publishes in his annual report the details of the expenditure of every Department in the service, it is therefore unnecessary for me to do more than state that the accounts for expenditure have, as in the past, been increasing.

*General Business of the Department.*

Over thirty officers of the outside service render monthly accounts of their expenditure, in addition to their weekly statements referring to revenue, all of which have to be examined and checked in this office and sent to the Auditor General for audit. 4,000 files have passed through this office during the last Departmental year; over 4,000 letters were written by the clerk who attends to the financial correspondence of this branch, to which he has been transferred from the Secretary's branch.

All payments of money for this Department are made through this office; over 40,000 entries were made in our books during the year. Scrip of all denominations is issued from this office; special record books are kept in which are entered not only scrip issued, but also scrip redeemed, so that any scrip issued can be traced in a very short time. Redeemed scrip is cancelled here, and kept as a record. The amount of labour in connection with scrip may be imagined when it is stated that nearly \$3,000,000 worth has been issued in different kinds. It will be noticed in the revenue statement that the quantity of scrip tendered to the Department for dues is getting smaller, and that cash payments are on the increase.

Since my last report, better accommodation has been furnished for my officers, and work can now be performed in a much more satisfactory manner. The staff of this branch is composed of seven permanent officers and one extra clerk, all of whom have their respective duties clearly defined. The test that the new system of accounts has passed through since its inauguration in July, 1883, is sufficient to allow me to state that the change has met your expectations.

The annual cost of salaries for this branch is under \$9,000, which is very moderate, if the amount of work and the manner in which it is performed are taken into consideration. During this year the school lands accounts have been adjusted, beginning at the date when the Government made the first sale of these lands. This revenue is for the advancement of education in the province or district in which such school lands are located, either in Manitoba or the North-West Territories. The accounts have been adjusted to 30th June, 1891, and a separate book is now opened for them.

The statements hereto attached show that the cash revenue from Dominion lands has increased by nearly \$35,000; that from Ordnance lands has increased by over \$10,000; that from school lands by nearly \$10,000; that from registration fees in the North-West Territories by nearly \$2,000.



The statements relating to revenue received during the last departmental year are prepared in a tabular form, are seven in number, and are marked "A," "B," "C," "D," "E," "F" and "G."

"A" shows the revenue received during the departmental year from the several agencies of the outside service and at headquarters in Ottawa.

"B" shows revenue from Ordnance lands, month by month, during the departmental year, a total in cash receipts of \$50,932.71.

"C" shows revenue from sale of school lands, during the departmental year, from each of the school districts in Manitoba and the North-West Territories, amounting to a total of \$55,339.45.

"D" shows revenue for registration fees, from each of the registration districts in the North-West Territories during the departmental year, amounting to a total of \$13,645.27.

"E" shows revenue received for fines and forfeitures in the North-West Territories during the departmental year, amounting to \$1,187.40.

"F" shows receipts on account of casual revenue, during the departmental year, amounting to \$136.

"G" shows revenue received on account of Dominion lands, during the departmental year. The revenue is shown, month by month, under each sub-head.

The total amount in cash received is \$276,107.11.

The total amount in scrip received is \$157,547.73, or a grand total of \$433,654.84.

Respectfully submitted,

J. A. PINARD,

*Accountant.*

A. M. BURGESS, Esq.,  
Deputy Minister of the Interior,  
Ottawa.

## A.

STATEMENT of Receipts on account of Dominion Lands for the Year commencing 1st November, 1890, and ending 31st October, 1891.

	Cash.	Scrip and Warrants.	Total.
	\$ cts.	\$ cts.	\$ cts.
Dominion Lands Agencies—			
Winnipeg.....	16,918 59	36,806 98	53,725 57
Souris.....	14,925 50	33,658 94	48,584 44
Calgary.....	8,063 32	14,117 80	22,181 12
Turtle Mountain.....	9,263 48	21,638 11	30,901 59
Qu'Appelle.....	15,633 77	4,706 37	20,340 14
Little Saskatchewan.....	8,520 13	4,292 93	12,813 06
Birtle.....	10,927 72	3,031 34	13,959 06
Touchwood.....	2,837 00	306 66	3,143 66
Edmonton.....	10,592 58	3,777 77	14,370 35
Lethbridge.....	2,338 11	2,632 00	4,970 11
Prince Albert.....	1,132 73	2,422 46	3,555 19
Battleford.....	717 64		717 64
Côteau.....	2,353 05	1,620 00	3,973 05
Swift Current.....	553 00		553 00
New Westminster.....	23,399 34	9,880 00	33,279 34
Kamloops.....	20,724 72		20,724 72
Crown Timber Agents—			
Winnipeg.....	34,164 21		34,164 21
Edmonton.....	6,180 98		6,180 98
Prince Albert.....	6,142 69		6,142 69
Calgary.....	11,903 54		11,903 54
New Westminster.....	45,944 31		45,994 31
Temperance Colonization Company.....	65 28	4,460 00	4,525 28
Rocky Mountains Park of Canada.....	3,911 33		3,911 33
Grazing Lands.....	2,353 73	14,196 37	16,550 10
Hay Permits.....	5,844 58		5,844 58
Mining Fees.....	732 30		732 30
Stone Quarries.....	44 05		44 05
Coal Lands.....	174 50		174 50
Map Sales and Office Fees.....	1,264 37		1,264 37
Surveyors' Examination Fees.....	70 00		70 00
Fees <i>re</i> Applications for Patents.....	2,802 50		2,802 50
Town Sites.....	5,050 00		5,050 00
Trust Account.....	426 06		426 06
Miscellaneous.....	82 00		82 00
Total.....	276,107 11	157,547 73	433,654 84

J. A. PINARD,  
*Accountant.*

DEPARTMENT OF THE INTERIOR,  
ACCOUNTANT'S BRANCH,  
OTTAWA, 29th February, 1892.

## B.

STATEMENT of Receipts on account of Ordnance Lands for the Year commencing 1st November, 1890, and ending 31st October, 1891.

Month.	Amount.	Total.
1890.	\$ cts.	\$ cts.
November.....	1,339 81	
December.....	20,665 81	
1891.		
January.....	990 00	
February.....	541 25	
March.....	384 67	
April.....	2,032 64	
May.....	1,407 48	
June.....	6,800 64	
July.....	7,918 57	
August.....	1,335 65	
September.....	86 80	
October.....	7,429 39	
		50,932 71

J. A. PINARD,  
*Accountant.*

DEPARTMENT OF THE INTERIOR,  
ACCOUNTANT'S BRANCH,  
OTTAWA, 29th February, 1892.

## C.

STATEMENT of Receipts on account of School Lands for the Year commencing 1st November, 1890, and ending 31st October, 1891.

School District.	Amount.	Total.
	\$ cts.	\$ cts.
Manitoba.....	35,575 48	
Assiniboia.....	551 33	
Alberta.....	18,962 44	
Saskatchewan.....	250 20	
		55,339 45

J. A. PINARD,  
*Accountant.*

DEPARTMENT OF THE INTERIOR,  
ACCOUNTANT'S BRANCH,  
OTTAWA, 29th February, 1892.



## D.

STATEMENT of Fees received from Registrars for the Year commencing 1st November, 1890, and ending 31st October, 1891.

Registration District.	Amount.	Total.
	\$ cts.	\$ cts.
Assiniboia.....	5,332 39	
South Alberta.....	5,585 28	
North do.....	893 77	
East Saskatchewan.....	1,746 66	
West do.....	87 17	
		13,645 27

J. A. PINARD,  
*Accountant.*

DEPARTMENT OF THE INTERIOR,  
ACCOUNTANT'S BRANCH,  
OTTAWA, 29th February, 1892.

## E.

STATEMENT of Receipts on account of Fines and Forfeitures in the North-West Territories for the Year commencing 1st November, 1890, and ending 31st October, 1891.

Date.	Through Whom Paid.	Amount.	Total.
		\$ cts.	\$ cts.
1891.			
Jan. 17..	His Honour the Lieut. Governor of the North-West Territories.....	270 00	
April 14..	do do do.....	580 40	
Aug. 21..	do do do.....	337 00	
			1,187 40

J. A. PINARD,  
*Accountant.*

DEPARTMENT OF THE INTERIOR,  
ACCOUNTANT'S BRANCH,  
OTTAWA, 29th February, 1892.

F.

STATEMENT of Receipts on account of Casual Revenue for the Year commencing 1st November, 1890, and ending 31st October, 1891.

Date.	Name.	Particulars.	Amount.	Total.
1890.			§ cts.	§ cts.
Dec. 20...	McIntyre and Code.....	Refund of previous year's expenditure.....	136 00	136 00

J. A. PINARD,  
*Accountant.*

DEPARTMENT OF THE INTERIOR,  
ACCOUNTANT'S BRANCH,  
OTTAWA, 29th February, 1892.

G.

STATEMENT of Receipts on account of Dominion Lands for the Year commencing 1st November, 1890, and ending 31st October, 1891.

MONTH.	Homestead Fees.	Pre-emption Fees.	Improvements.	General Sales of Lands.	Timber Dues.	Rents from Grazing Lands.	Royalty from Stone Quarries, Hay Permits, Mining Fees, &c.	Inspection Fees, Fees for Application for Patents, &c.	Surveyors' Examination Fees, &c.	Trust Account.	Rocky Mountains Park of Canada.	Map Sales, Office and Registration Fees, &c.	Miscellaneous.	Total.
1890.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.
November.....	1,830 00	.....	487 92	11,626 29	7,703 04	55 46	495 37	1,035 00	.....	.....	532 20	259 15	17 50	24,041 93
December.....	2,900 10	.....	503 50	7,600 83	14,420 57	156 43	219 80	1,442 50	.....	211 90	80 50	136 50	25 00	27,697 63
1891.														
January.....	1,870 00	.....	679 80	9,908 58	5,094 25	59 92	364 60	1,120 00	.....	.....	25 00	46 25	.....	19,168 40
February.....	1,420 00	10 00	695 10	11,431 85	6,554 81	308 60	129 26	912 50	40 00	.....	18 00	146 65	65 00	21,731 77
March.....	1,160 00	.....	312 50	2,793 40	8,384 53	63 80	121 20	742 50	.....	.....	38 00	69 80	.....	13,685 73
April.....	3,200 00	.....	723 75	9,480 36	7,705 72	49 90	448 60	1,245 00	.....	.....	214 65	90 65	5 28	23,163 91
May.....	3,170 00	.....	711 00	7,346 10	7,197 04	53 70	951 30	1,580 00	.....	.....	75 75	230 00	.....	21,314 89
June.....	4,370 00	.....	395 50	7,832 34	5,604 85	302 82	819 40	1,460 00	.....	214 16	352 80	166 46	.....	21,518 33
July.....	4,320 00	.....	364 05	8,970 72	8,243 30	440 36	939 60	2,117 50	.....	.....	300 25	306 01	.....	26,021 79
August.....	3,670 00	10 00	557 35	7,067 91	7,546 65	131 15	1,474 80	1,805 00	30 00	.....	437 10	62 00	.....	22,791 96
September.....	3,500 00	.....	487 00	8,019 37	4,750 51	383 63	511 75	1,882 50	.....	.....	434 20	229 87	5 00	20,203 83
October.....	3,120 00	.....	670 20	5,931 79	21,180 46	347 96	299 75	1,700 00	.....	.....	1,402 88	61 90	52 00	34,766 94
Scrip and warrants.....	34,530 10	20 00	6,587 67	98,009 54	104,385 73	2,353 73	6,795 43	17,042 50	70 00	426 06	3,911 33	1,805 24	169 78	276,107 11
Total.....	.....	.....	.....	143,351 36	.....	14,196 37	.....	.....	.....	.....	.....	.....	.....	157,547 73
	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	433,654 84

J. A. PINARD,  
Accountant.

DEPARTMENT OF THE INTERIOR,  
ACCOUNTANT'S BRANCH,  
OTTAWA, 29th February, 1892.



APPENDIX A.

STATEMENT of Entries affecting Dominion Lands, which were made at the Head Office and at the Agency of the undermentioned Colonization Company, during the Year commencing the 1st November, 1890, and ending the 31st October, 1891.

Where Made.	Homesteads.		Special Grants.		Hudson Bay Company.		C. P. Railway.		Manitoba and North-Western Railway.		Manitoba and South-Western Railway.		North-Western Coal and Navigation Company.		Qu'Appelle, Long Lake and Saskatchewan Ry. and Steam-boat Co.		Totals.	
	No.	Acres.	No.	Acres.	No.	Acres.	No.	Acres.	No.	Acres.	No.	Acres.	No.	Acres.	No.	Acres.	No.	Acres.
Head Office.....	.....	.....	101	8,230	7	61,734	220	48,063	2	311	10	2,216	2	1,280	1	320	343	122,154
The Temperance Colonization Society....	8	1,246	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	1,246
Total.....	8	1,246	101	8,230	7	61,734	220	48,063	2	311	10	2,216	2	1,280	1	320	351	123,400

WM. M. GOODEVE,  
Chief Clerk, Patent Branch.

DEPARTMENT OF THE INTERIOR,  
LANDS PATENT BRANCH,  
OTTAWA, January, 1892.

## APPENDIX B.

ABSTRACT of Letters Patent covering Dominion Lands situate in Manitoba, the North-West Territories and British Columbia, issued from the Department of the Interior, between the 1st of November, 1890, and the 31st of October, 1891.

Number.	Nature of Grant.	1890-91.		1889-90.	
		Number of Patents.	Area in Acres.	Number of Patents.	Area in Acres.
1	Homesteads .....	1,149	179,127	1,385	212,405
2	Sales .....	549	106,184	813	114,238
3	British Columbia homesteads .....	63	9,197	41	6,470
4	do sales .....	128	3,371	84	11,314
5	Canadian Pacific Railway .....	285	64,958	294	99,296
6	Military homesteads .....	59	18,825	88	27,603
7	Half-Breed allotments .....	25	5,920	49	11,760
8	North-West Half-Breed grant .....	11	2,289	32	5,721
9	Manitoba Act grants .....	18	1,427	16	1,595
10	Special grants .....	76	5,747	169	9,354
11	Manitoba and North-Western Railway .....	2	311	27	12,183
12	Manitoba and South-Western Colonization Railway .....	10	2,130	24	5,217
13	Commutation right of common and cutting hay .....	17	1,326	22	1,786
14	Hudson Bay Company .....	4	1,253	8	22,182
15	North-Western Coal and Navigation Company .....	6	3,587	178	80,677
16	School land sales .....	16	1,883	4	640
17	Canadian Pacific Railway road-bed and st'n grounds .....	7	224	11	501
18	Mineral rights .....	7	.....	4	.....
19	Parish sales .....	7	2,002	3	45
20	Coal land sales .....	3	805	17	2,792
21	Forest tree culture claim .....	.....	.....	1	160
22	Mining sales .....	2	185	3	80
23	Leases .....	2	2	.....	.....
24	Assignments of mortgages .....	2	.....	.....	.....
25	Qu'Appelle, Long Lake and Saskatchewan Railroad and Steamboat Company .....	1	320	.....	.....
	Totals .....	2,449	411,073	3,273	626,019

WM. M. GOODEVE,  
Chief Clerk, Patent Branch.

DEPARTMENT OF THE INTERIOR,  
LANDS PATENT BRANCH,  
OTTAWA, January, 1892.

APPENDIX C.

STATEMENT showing the number of Patents forwarded to the several Registrars of the Land Registration Districts of the North-West Territories, and number of notifications mailed to Patentees from 1st November, 1890, to 31st October, 1891, inclusive.

Registration District.	Number of Patents sent Registrars.	Number of Notifications Mailed to Patentees.
Assiniboia. ....	565	545
East Saskatchewan.....	144	136
West do .....	32	53
North Alberta.. ..	87	135
South do .....	437	416
Total.....	1,265	1,285

WM. M. GOODEVE,  
*Chief Clerk, Patent Branch.*

DEPARTMENT OF THE INTERIOR,  
LANDS PATENT BRANCH,  
OTTAWA, January, 1892.

APPENDIX D.

STATEMENT showing the number of Deeds of Transfer recorded at Head Office from the 1st November, 1890, to 31st October, 1891, and the amount received as fees therefor.

Number of deeds registered. ....	285	Amount of fees received.....	\$ cts. 566 00
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WM. M. GOODEVE,  
*Chief Clerk, Patent Branch.*

DEPARTMENT OF THE INTERIOR,  
LANDS PATENT BRANCH,  
OTTAWA, January, 1892.





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PART II.

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DOMINION LANDS SURVEYS.

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## No. 1.

## REPORT OF THE SURVEYOR-GENERAL.

DEPARTMENT OF THE INTERIOR,  
TOPOGRAPHICAL SURVEYS BRANCH.  
OTTAWA, 8th February, 1892.

A. M. BURGESS, Esq.,  
Deputy Minister of Interior.

SIR,—I have the honour to submit the following report upon the operations of the Topographical Surveys Branch during the year 1891.

The appropriation for 1890-91 having been expended for surveys executed during the summer of 1890, it was necessary to wait until a further appropriation had been voted by Parliament before undertaking new surveys, but when it was voted the season was too far advanced for commencing operations. The result is that very few surveys were made during last summer.

## MANITOBA.

The only survey made in Manitoba is the subdivision of three townships at Lake Dauphin by Mr. A. F. Martin, D.L.S. It was urgently needed, as a large settlement exists on Turtle River.

## NORTH-WEST TERRITORIES.

Only one subdivision survey contract was given in the North-West Territories. It comprised one township and a half on Shell River, north-west of and close to Prince Albert. There are already two settlers in the locality and more were expected to come immediately after the completion of the survey.

## ROCKY MOUNTAINS AND BRITISH COLUMBIA.

The topographical survey of the Canadian Pacific Railway Belt across the Rocky Mountains and British Columbia has been continued.

The main triangulation was, as formerly, under the direction of Mr. W. S. Drewry, assisted by Mr. St. Cyr, in charge of the observing party.

The object of this work is to supply a number of reference points to which subsequent surveys may be tied, thus saving the time and cost of running long survey lines across the mountains for the purpose of connecting with the railway line. These points are the summits of mountains; they are selected by Mr. Drewry, and signals are erected thereon either by himself or by a sub-party in charge of a topographer. After them comes Mr. St. Cyr, who observes the angles.

This plan of operations requires the three parties to travel over a vast extent of territory; in doing so they collect a large amount of information which is available for preliminary maps of the country explored. In this way they have examined last season a district almost entirely unknown between the Columbia River and the summit of the Selkirks, and found the topography wholly different from any published map. In view of the attention attracted by the mines, a new map of the district will prove most useful. Quartz mining has been progressing rapidly in the Spallumcheen district. It appears that upwards of a hundred claims have been staked, and that four companies are carrying on work this winter. The ore is principally an argentiferous galena of medium grade.

The season was not favourable for surveying operations, the great storms of September and October, 1890, having left so much snow on the mountains that work was difficult as late as the middle of July.

In addition to his regular work Mr. Drewry surveyed, at the beginning of the season, the road from Canmore to the boundary of the Rocky Mountains Park.

Mr. J. J. McArthur was, as usual, engaged on his topographical survey; he worked on both sides of Bow River between the foot and the summit of the Rocky Mountains. He surveyed about five hundred square miles, made forty-three ascents of mountains from eight to ten thousand feet above the sea, and travelled with his horses and outfit over 400 miles along mountain passes.

Eight sheets of this survey have been published, and ten more will be ready for publication at the end of the winter.

In New Westminster district, British Columbia, Mr. A. Driscoll continued the subdivision surveys on which he was previously engaged. The progress of the work in that heavily wooded country is, of course slow, and much time is lost in travelling from place to place. Mr. Driscoll also made a survey of some land required on Morris Lake and Creek by the Department of Fisheries for salmon breeding purposes.

Mr. J. Vicars subdivided lands in Kamloops district, particularly in the Spallumcheen Valley. He reports the country to be well settled and the crops magnificent.

#### EXPLORATIONS.

Mr. Wm. Ogilvie was instructed to examine the country between the Liard and Peace Rivers on the eastern slope of the Rocky Mountains where it is proposed that the Dominion shall take 3,500,000 acres of public land in the Province of British Columbia in accordance with the provisions in that behalf of the Settlement Act. Mr. Ogilvie proceeded to Fort Simpson by way of Edmonton, Athabasca Landing and the Athabasca, Great Slave and Mackenzie Rivers. He then went up the Liard and the East Branch of the Nelson River where he had to leave his canoe and proceed over land to Fort St. John on the Peace River, a journey of 140 miles. He returned by the Peace River, the Lesser Slave Lake and River, and the Athabasca River to the Landing and Edmonton, arriving there on the 14th December last. He has collected much valuable information which will appear in his report.

Mr. Klotz examined the amber deposits at Cedar Lake and laid out into lots the beach on which they are located. The amber is found in small fragments lying on the surface, mixed with little pieces of wood partly decomposed.

He went to see several places in the vicinity where amber had been reported to exist in quantities, but in all these cases the information proved incorrect.

#### INSPECTION AND CORRECTION OF SURVEYS.

The Chief Inspector of Surveys spent a part of the summer in Manitoba and the North-West Territories making arrangements for the resurvey of a portion of Prince Albert district. He also attended to several minor matters in connection with roads, the sale of survey outfits, &c. At Lake Dauphin he examined the subdivision survey work of Mr. A. F. Martin.

#### OFFICE WORK.

The correspondence consisted of:—

Letters received.....	807
Letters sent.....	1,585

The accounts examined and payments made were:—

Accounts examined and passed.....	195
Amount of accounts.....	\$80,456.75
Cheques forwarded.....	1094

The Chief Astronomer has superintended the calculations necessary for the location of boundaries of the Railway Belt in British Columbia. He had to prepare and revise a new edition of the Manual of Survey, comprising many new tables. The checking and compilation of surveyors' observations was also under his direction.

During the summer he proceeded to British Columbia to inspect the surveys there, visiting the Northern Coast before his return.

The following is a synopsis of the work performed in the draughting office:—

Plans received with corresponding field notes :

Subdivision .....	65
Outline .....	19
Settlements and Town Plots.....	3
Correction Surveys and Miscellaneous.....	101
Township plans compiled.....	130
Miscellaneous plans and diagrams made .....	100
Miscellaneous tracings.....	198
Plans completed for printing.....	175
Lithographic proofs examined.....	229
Declarations of settlers received.....	94
Progress sketches received.....	91

The map of the Railway Belt in British Columbia on a scale of 3 miles to an inch has been completed and printed in eight sheets. A plan of the Calgary Land district and a small map of the North-West Territories showing electoral districts were prepared for photo-lithography.

A schedule for notification to the Hudson Bay Company of townships surveyed was prepared last summer.

Mr. Johnston was supplied with information for a new edition of the large map of Manitoba and the North-West.

Among other miscellaneous work is included the revision of surveyors' reports, copying field notes and declarations, descriptions of lands for patent, preparing contracts for surveys, &c. We have received prints of eight sheets of the Topographical Survey in the Rocky Mountains, namely, Banff, Anthracite, Cascade Mountain, Saddle Mountain, Forty Mile Creek, Castle Mountain, Gap and Canmore.

The appended schedule of the work of the lithographic office shows a total of 55,261 copies printed.

The work of the photographer was as follows:—

For the Topographical Surveys Branch :

Negatives developed.....	360
Negatives for photo-lithography.....	42
Transparencies.....	45
Enlargements.....	370
Silver prints.....	100

For the Geological Survey Department:

Negatives developed.....	570
Silver prints.....	668
Enlargements.....	6

He was also employed six weeks in the field for the Geological Survey Department, making photographs of mines, rock sections and Canadian trees.

The Board of Examiners for Dominion Land Surveyors has suffered the loss of an old and valued member by the death of Major A. C. Webb, one of those appointed to the Board on its organization in 1875.

Meetings of the Board were held in February and August, 1891. The following gentlemen, having passed the requisite examination, were granted commissions as Dominion Land Surveyors:—

James Gibbons, P.L.S., Ottawa, Ont.

Joseph Edmund Ross, P.L.S., Beachburg, Ont.

Louis Valentine Rorke, P.L.S., North Bay, Ont.

The correspondence of the Board amounted to:—

Letters received.....	116
Letters sent.....	128



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The following documents are appended:—

Report of the Chief Astronomer.

Schedule showing Dominion Land Surveyors employed during the year.

Schedule showing the work executed by the Lithographic office.

Surveyors' reports on last year's operations.

Report of J. I. Dufresne on survey of township outlines of 1889.

The last document was received too late for insertion in previous annual reports.

I have the honour to be, Sir,

Your obedient servant,

E. DEVILLE,

*Surveyor-General.*

## No. 2.

## REPORT OF THE CHIEF ASTRONOMER.

DEPARTMENT OF THE INTERIOR,  
TOPOGRAPHICAL SURVEYS BRANCH,  
OTTAWA, 5th February, 1892.

E. DEVILLE, Esq.,  
Surveyor-General.

SIR,—I have the honour to submit my annual report upon that portion of the work of this office which comes immediately under my personal supervision, consisting principally of astronomical and geodetic computations.

Since the date of the last annual report, little new astronomical work has been done, and the astronomical calculations have consisted chiefly of the computation of the observations taken in the previous year, and the checking and arrangement of the results of the work of former years in convenient form for reference.

Mr. Klotz, while engaged on his survey of amber locations, has made a practical trial in the field of the method for latitude by azimuths of two stars at their greatest elongations. The results of different observations by this method are remarkably accordant, showing a probable error much less than would occur in the method of meridian altitudes with the same number of observations with a circle of the same size as the azimuth plate of the instrument he used. The method is very simple in practice, and it appears to be the best method for use by surveyors provided with instruments of our pattern. It is proposed to calculate, for the use of explorers, tables which will facilitate the preparation for the observations.

Tables of the Star Factors for transit observations, commonly known as the A. B. C. factors, have been prepared, in a somewhat different form from that usually employed. In the usual form of table there are two arguments. To avoid the double entry, which is inconvenient, and a frequent source of error, I had the factors calculated for declinations near enough together to avoid second differences and for every five degrees of latitude between certain limits. For intermediate latitudes a small correction is applied. The table has been printed.

A collection has been made of all the observations taken by Dominion Land Surveyors for magnetic declination, inclination and intensity. The calculations have been checked and the observations arranged according to districts, and they are now ready for publication whenever desired.

A recomputation has been made of the geodetic tables appended to the Manual of Surveys, enlarging them, and adding many new tables.

Many changes have been made in the general instructions to surveyors to suit the new conditions, now that the surveys have been extended into the wooded country, and into the Railway Belt of British Columbia. Accordingly the whole Manual of Surveys has been rewritten with the necessary amendments. The manuscript has been completed and submitted to you.

The work of adjusting the micrometer traverses outside of the country covered by the township surveys so as to arrive at correct latitudes and longitudes of intermediate points for mapping purposes, is in progress.

Many points in the Rocky Mountains have been fixed in latitude and longitude by the topographical survey. These points are marked on the ground by cairns or posts, and from them a surveyor employed to lay off mineral claims, &c., can start his survey. As the mere latitude and longitude of such a point would be of little use to a surveyor desirous of making his survey accord with the rectangular system prescribed by law for the survey of Dominion lands, a further calculation is made in the

office by which the co-ordinates of these points referred to section lines can be given. The method of calculating these co-ordinates is the same as that adopted in the reduction of the traverse of the railway line. This method I described in my report for the year 1886.

Most of the cairns are on mountain peaks, so that a survey cannot be connected with them except by triangulation. The best method of making the connection in most cases will be the "three point" method. It is proposed to prepare tables of the lengths and azimuths of the sides of the triangles which will facilitate the application of this method.

In this work I am assisted by Mr. J. I. Dufresne as computer, and by Mr. Klotz, who is at present engaged in the calculation of the limits of the Railway Belt in British Columbia. The work of my office is now well advanced.

There has been a good deal of miscellaneous work besides that specified above, such as preparation of rates for subdivision contracts, checking railway right of way plans and descriptions, &c.

In July last I proceeded to British Columbia to examine the surveys there. In the discharge of this duty I visited many parts of the lower Fraser Valley. The surveys there are in a generally forward state so far as the immediate vicinity of the settlements is concerned, but settlers are rapidly taking up land further back, and making new settlements in the forest, so that it is impossible with the force at our disposal (one surveyor with party) to make the progress that would be desirable. Many of the difficulties of these British Columbia surveys arise from the obliteration of old lines. The re-establishment of these is not properly the duty of the Government, and interference in these cases is not generally advisable.

After about a month spent in this way I received your instructions to visit the Northern Coast. Upon this trip I have already reported, so that it is not necessary to add anything here.

On my return from this journey, in October, I stayed over at Kamloops for a short time to consult with Mr. Nash, the land agent, and Mr. Vicars, who was making the subdivision surveys in the railway belt in that vicinity. Much work remains to be done there, but it is not complicated by old surveys to the same extent as that in New Westminster district.

I have the honour to be, Sir,

Your obedient servant,

W. F. KING,  
*Chief Astronomer.*

SCHEDULE of Dominion Land Surveyors employed during the year ending  
the 31st October, 1891.

Surveyor.	Residence.	Description of Work.
Dennis, J. S. ....	Ottawa, Ont. ....	Chief Inspector of Surveys.
Driscoll, A. ....	New Westminster, B.C. ....	Subdivision and other surveys in British Columbia.
Drewry, W. S. ....	Belleville, Ont. ....	Triangulation of Railway Belt, B. C.
Klotz, O. J. ....	Preston, Ont. ....	Survey of Amber locations and computation of Ry. Belt, B. C.
Martin A. F. ....	St. Boniface, Man. ....	Subdivision of Townships.
McArthur, J. J. ....	Ottawa, Ont. ....	Topographical Survey of Rocky Mountains.
Ogilvie, Wm. ....	Ottawa, Ont. ....	Exploration in District of Athabasca.
Pearce, Wm. ....	Calgary, Alta. ....	Surveys at Lac La Biche, Lac Ste. Anne and Canmore.
Reid, J. L. ....	Prince Albert, Sask. ....	Subdivision of Townships.
Vicars, John ....	Cannington, Ont. ....	Subdivision and other surveys in British Columbia.



SCHEDULE showing the work executed by the Lithographic Office from the 1st Nov., 1890, to the 31st Oct., 1891.

Months.	Maps.		Townships.		Circulars.		Forms.	
	No. of Maps.	No. of Copies.	No. of Townships	No. of Copies.	No. of Circulars.	No. of Copies.	No. of Forms.	No. of Copies.
1890.								
November .....	1	75	12	660	1	100	12	7,307
December .....	2	185	16	880	.....	.....	4	5,550
1891.								
January .....	8	860	10	550	2	82	12	16,109
February .....	9	995	8	440	1	30	5	1,150
March .....	10	1,335	8	440	1	50	3	800
April .....	6	615	4	220	2	60	7	1,224
May .....	12	1,461	8	440	1	65	4	574
June .....	4	495	34	1,870	.....	.....	3	135
July .....	5	620	46	2,530	.....	.....	1	150
August .....	4	475	18	990	.....	.....	2	900
September .....	5	586	14	770	1	20	5	651
October .....	10	1,127	16	880	.....	.....	3	805
Total .....	76	8,829	194	10,670	9	407	61	35,355

RECAPITULATION.

Number of Maps .....	76	Number of Copies .....	8,829
do Townships .....	194	do .....	10,670
do Circulars .....	9	do .....	407
do Forms .....	61	do .....	35,355
340		55,261	

## No. 3.

## REPORT OF J. S. DENNIS, CHIEF INSPECTOR OF SURVEYS.

DEPARTMENT OF THE INTERIOR,  
TOPOGRAPHICAL SURVEYS BRANCH,  
OTTAWA, 26th January, 1892.

E. DEVILLE, Esq.,  
Surveyor-General.

SIR,—I have the honour to submit my annual report of the field and office operations of this branch under my charge during the past year.

In the early part of the year preliminary arrangements were made in the office for the correction surveys which it was then proposed should be carried on in the Prince Albert District and at other points in Manitoba, the Territories and British Columbia, during the survey season. These arrangements necessitated the preparation of a large number of plans, diagrams, schedules and memoranda to enable the work in the field to be correctly and expeditiously performed.

In consequence of the very limited amount of surveying which it was subsequently decided should be carried on during last season, it was not necessary for me to leave on my annual inspection trip to Manitoba and the Territories until the 9th of August. On that date, under your instructions, I left Ottawa and proceeded *via* the Canadian Pacific Railway to Calgary, where I arrived on the morning of the 17th. I remained in Calgary until the 24th, being engaged in completing arrangements for the sale of the horses and outfits which had been stored and wintered there from the previous season. This sale was held on the 31st.

Leaving Calgary on the morning of the 24th I drove south to Sheep Creek and made an examination of the different rights of way which had been surveyed for the crossing of this stream by the Macleod trail, and I also surveyed and marked a right of way to a spring which had been reserved on Section 2, in Township 20, Range 29, west of the 4th Meridian, having completed which I returned to Calgary on the 29th. Detailed reports regarding these matters were forwarded to you at that time.

On the 1st of September I accompanied Mr. D. L. S. Nelson, of the Indian Department, to the Industrial School at the mouth of High River, for the purpose of examining a proposed alteration in the survey of the main trail through this reserve and adjoining sections. A report of this examination has already been submitted.

I returned to Calgary on the 3rd, and then proceeded to Prince Albert *via* Regina, reaching there on the 6th. My visit to Prince Albert was for the purpose of examining the surveys in different parts of the district, and procuring the consent of the settlers and owners of land to the changes and corrections which it is proposed to make.

Before proceeding with this work I made a short trip to Shell River, about thirty-five miles north west of Prince Albert, and examined some townships there, the subdivision of which was being urged by the settlers and municipal authorities. A report of this examination was forwarded to you at the time, and a contract for the subdivision of some of these townships was subsequently let to Mr. D. L. S. Reid.

I was very agreeably surprised at the appearance of the country bordering on the Shell River. After travelling through timber and swamps and over a considerable extent of sand-hills and poor soil on the first twenty-five miles of the road going north-west from Prince Albert, you enter, almost without warning, upon an open and park like country along the Shell River, in which the soil is found to be good, water and fuel abundant, and the conditions for mixed farming apparently of the best.

I examined a tract of country there covering about five townships, which I found well adapted to agricultural purposes; and from the information obtained I am led to believe that there is a considerable district lying west of this tract which is well suited for mixed farming. The larger portion of this district has until quite recently been looked upon as within the limits of the timbered and swampy country, and consequently of little value.

After completing the examination at Shell River I proceeded to Stony Creek, about seventy miles east of Prince Albert, and made a careful examination of the original surveys of Townships 44 in Ranges 18 and 19, and of the resurvey of Township 44, Range 20, all west of the 2nd Meridian. I also procured the necessary agreements with the settlers owning or having entry for land in these townships to enable us to make the required corrections.

These townships form part of the Carrot River district, which may be said to embrace the country between the Pasquia Hills and the Saskatchewan River from Ranges 13 to 25 west of the 2nd Meridian. The townships, with others adjoining which are not yet subdivided, are attracting the attention of immigrants to that part of the country, notably those from Dakota, many of whom have taken up or made application for homesteads there.

That portion of the Territories known as the Carrot River district is in my opinion certain to become one of the most populous and wealthy districts of the west. As far back as 1876 it attracted attention owing to the reports of its fertility and beauty; the surveys and explorations since performed have confirmed in a great measure the glowing accounts of the beauty of the district and richness of the soil; and the experience of the settlers resident there seems to prove beyond question the wonderful fertility of the latter. The district is badly in need of a railway to provide an outlet for the crops and a ready means of ingress and egress, but this drawback will no doubt shortly be remedied by the continuation of the Manitoba and North-Western Railway.

I next visited Townships 46 and 47 A in Range 24, west of the 2nd Meridian, and examined the resurvey of these townships which had been made during the previous summer. After making this examination I entered into agreements with the settlers resident there regarding the approval of the new survey and suppression of the old.

I then visited the North and South Saskatchewan Rivers at the points where it is proposed to make a change in the present manner of closing the different systems of survey in the Prince Albert district, and made the necessary examinations to prove the feasibility of carrying this proposed change into effect. These examinations and the time spent in procuring the consent of interested parties to the proposed changes kept me employed until the end of September, when I returned to Prince Albert. Detailed reports of my investigations, with the different agreements entered into, were duly forwarded from time to time.

While at Prince Albert I arranged for and held a sale by auction of the horses and outfits which had been stored there for the past two seasons.

I returned to Calgary on the 3rd of October for the purpose of attending court as a witness in a case regarding the obstruction of the main trail between Calgary and Morleyville as surveyed by the Department.

On the 6th of October I left Calgary for Yorkton, travelling *viâ* the Canadian Pacific and Manitoba and North-Western Railways. At Yorkton I sold some horses and outfits which had been wintered at Devil's Lake near there, and on the 10th I returned east along the Manitoba and North-Western Railway to Neepawa.

At Neepawa I procured a team and buckboard and drove north about eighty miles to Lake Dauphin, where I sold some horses and outfits which had been wintered there. I also made an inspection of the work in subdivision contract No. 1, of 1891, the townships comprising which adjoined Lake Dauphin on the south and east.

This portion of the Province of Manitoba has attracted considerable attention during the past few years, and there has been a steady influx of settlers, the country adjoining the lake on the south and west being thickly settled.



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I was much impressed with the district. The soil is first-class, and there is an abundance of wood and good water. The crops which I saw prove that with the advent of railway communication this district will make rapid strides.

At the south and south-east ends of the lake stock-raising is extensively carried on, and some fine herds of well-bred cattle were seen.

I reached Neepawa on my return trip on the 18th of October, and having completed my field operations for the season I left for home, reaching Ottawa on the 22nd.

I have the honour to be, Sir,

Your obedient servant,

J. S. DENNIS,  
*Chief Inspector of Surveys.*

## No. 4.

## REPORT OF J. J. McARTHUR, D.L.S.

## TOPOGRAPHICAL SURVEY IN THE ROCKY MOUNTAINS,

OTTAWA, 1st February, 1892.

E. DEVILLE, Esq.,

Surveyor-General.

SIR,—I beg leave to submit to you my report on the photo-topographical survey of the Rocky Mountains, carried on by me during the past season.

I left Ottawa on June 16 for Morley, forty-five miles west of Calgary, where I had left my outfit the fall before. I found my horses and everything in excellent condition. On the 29th we started out for the headwaters of the Ghost and Little Red Deer Rivers, entering the mountains by way of the Devil's Head Pass. To the north of the Stony Indian reserve there is some fine grazing country, and quite a few ranchers have already located there. Our trail led up the middle branch of Ghost River, crossing back and forth over the wide shingle bed. This is a rather peculiar stream. It issues as a torrent from the mountains, and after flowing a couple of miles disappears in the gravel to break forth again some miles further down. The morning of our second day out we crossed the south-eastern boundary of the Rocky Mountains Park. The eastern escarpment of the Rockies is very forbidding, as the spurs of the high Palliser Range terminate abruptly in precipices of more than a thousand feet. About four miles from the Park boundary we come to the Devil's Gap, which is the outlet of the depression in which Lake Minnewanka lies. It has the appearance of a broad cañon walled in by cliffs nearly fifteen hundred feet high. About three miles further a sharp bend brings us close under walls of rock along whose base we continue to the mouth of the cañon. Words cannot convey an idea of the wild grandeur and extreme solitude of this mountain fastness. The river flows in a very narrow valley, nearly due east and west, and the cliffs rise so high on each side as to almost shut out the sun's rays.

We pitched our camp at the mouth of a large tributary from the north, and made two ascents. We attempted to scale the Devil's Head, that peculiarly shaped mountain, which is so familiar to travellers on the plains; but we did not succeed, as it presented no vulnerable point, but was sheer precipice on all sides. We continued our course west almost to the foot of Mount Aylmer, which rises 10,300 feet in the air; the valley then expands and turns to the north. About two miles further a pass comes in from the west, up which a trail leads over to Lake Minnewanka. We followed the valley up to the summit, making six ascents on the way. I expected to be able to cross over to the Little Red Deer River, which takes its rise in the same mountain, but we found the divide too high and had to retrace our steps to the Mt. Aylmer pass, as our only route to the Red Deer country was over this pass to Lake Minnewanka and up the valley of the Cascade River.

It is 1,200 feet of an ascent to the summit, but the distance is three miles and the trail is good. After leaving the timber line we entered a beautiful alpine valley which continued to the divide and which was bright with flowers. We started many coveys of ptarmigan and saw a number of marmots.

A short distance beyond the summit the gulch was filled with an immense snow bank which we had to cross, and down its steep slope our animals had to "glissade," squatting on their haunches and making some comical evolutions in the efforts to keep from rolling. We camped at the foot of this snow bank in a garden of flowers which would prove a paradise to a botanist. Never have I seen such variety and profusion.

Our horses had become quite footsore, travelling over the gravel flats of Ghost River, and I decided to take them in to Banff, in order to have them shod. We reached there on the 13th July. On the 17th we started up the Cascade valley, on our way replacing the wooden posts at the reference points which we had located the season before, by iron bars surrounded by mounds of stone.

About sixteen miles up a creek comes in from the north, up which a trail leads across the Panther River or south branch of the Red Deer. At this fork we located an iron bar and stone mound (M. VI). After leaving the Cascade we moved up a narrow valley, which for a couple of miles is bordered by low wooded hills. It expands as we approach the summit, which is about six miles from the Cascade. The country in this neighbourhood is beautiful; the mountains are distant a few miles, and foothills more or less wooded lead down to the valley, which is quite open. This part of the country must have been at one time alive with game; but now we scarcely meet with a sign of animal life. The altitude of this summit is 6,560 feet above the sea. A railway is chartered to run from Anthracite through this pass and down to the coal fields. We occupied three triangulation and five camera stations, and then moved down the south branch of the Panther River, which takes its rise near this summit to the main stream, about four miles distant. The north branch comes in a few hundred feet further up, and near its junction I planted an iron bar opposite a succession of beautiful cascades.

The main stream comes from the west, and I extended my work about ten miles in that direction. I also went up the north branch as far as the divide leading over to the big Red Deer River, and planted an iron bar about one half mile south of the summit. We then started down the Panther River in search of a pass over to the little Red Deer. About one mile east of the forks the river cuts through a high range of mountains beyond which the valley expands and runs through a foothill country for several miles, when it pierces another high range and enters a foothill country again. Its course from the forks for about nine miles is a little north of east.

We had some trouble in getting across to the little Red Deer, a distance of about four miles, as there was no pass, and the intervening mountains were high and difficult. The course of the last mentioned stream from its source near the head of the middle branch of Ghost River is a little west of north for about seven miles, when it swings out of the mountains and runs in an easterly direction. We made four ascents along this valley, and completed the work I had laid out to do in this vicinity.

I had to close my triangulation on Bonnet Peak, which is Station 15 of the primary triangulation, and to do so had to retrace my steps to the Cascade River, which we followed to its source. Besides Bonnet Peak we made three ascents to finish our work in this neighbourhood. From the time we left Banff we were greatly retarded by wet and foggy weather, and on August 6th we had a snow storm, all traces of which, however, disappeared in a few days.

Our next work was up the Simpson Pass south of Bow River, and we travelled by the Forty-mile Creek and Mount Edith Pass, on our way replacing the wooden monuments of last year by iron bars and stone mounds. We passed through Banff on August 18th.

A description of the Simpson Pass is contained in my report of last year. At the summit, which is the watershed of the continent, we located an iron bar. To the west and north from here there are strong indications of minerals. We occupied six stations, our work extending some distance into British Columbia.

Our next work was west of Castle Mountain, on the north side of the Bow, and we returned to Banff, which was the only point at which we could conveniently cross the river. We passed through on the 29th August and reached Laggan 3rd September. Owing to the dense smoke we were not able to do much work during the two weeks following.

While at Laggan I had occasion to visit Lake Louise, which has become a point of interest to tourists by the Canadian Pacific Railway. The company has built a



carriage road and erected a chalet close to the water's edge for the accommodation of visitors. This beautiful alpine lake lies between two spurs of the Summit Range, but a few hundred feet below the snow line; and in the calm evenings the fir trees and barren rocks are reflected with wonderful distinctness in its surface.

At the southern end of the lake Mt. Lefroy lifts its ice-clad head above the clouds, and looks in cold contempt upon the world below, its long freezing glacier like an arm grasping the landscape around it. We crossed the lake in a punt and travelled along a small stream about a mile to the foot of the glacier.

There are few spectacles in nature so calculated to inspire awe as these rivers of ice. The surface, which is thickly strewn with fragments of different kinds of rock, is riven by immense crevasses, up through which comes the deep rumble of subglacial streams, and one feels sensible of its motion as he hears the mass crack and heave under his feet.

A tributary comes in from the east, its junction with the main stream marked by a ridge of debris—a medial moraine. Mt. Lefroy rises between them and towers nearly six thousand feet above. To the south-west is a snow-clad ridge 11,400 feet above the sea, which is the summit of the Rockies, as is also Mt. Lefroy. Between them is a pass, which is the *névé* of this glacier and of one which flows towards the Pacific. The noise caused by the fall of the masses of ice which break from the glaciers which nestle on the high ledges is deafening, and the faces of the mountains are streaked with bands of blue and green which mark the recent fractures. The contrast is very forcible as we turn from this scene of desolation to the beautiful lake below and the deep green forest. There are two smaller and picturesque lakes nestling on the high benches west of Lake Louise; a bridle path leads up to them, and from the upper and larger one, which is close to timber line, a very extensive view of the Bow River valley is to be had. We had rain on the 17th and 18th September, which cleared the atmosphere, and we started up Baker Creek on the 19th. The trail is very good. We followed the stream to its source and crossed over to the Red Deer River, which takes its rise near the same divide. The scenery around here is beautiful, the valleys are wide and almost prairie, and the mountains are very high. A branch of the Pipestone Creek takes its rise here and flows to the west. We followed it about six miles to its junction with the main stream, near where we located an iron bar. At this point the valley of the Pipestone is about one-half mile wide. We moved south along the creek about seven miles, and then west across the intervening wooded ridge to the Bow River, up which we travelled to midway between the two lakes. We had several storms about this time, and the snow lay quite deep upon the mountains. We managed with difficulty to occupy three stations, one of which was Station 16 of the primary triangulation, and returned to Laggan, which place we reached on October 11th.

I had hoped to be able to carry my work across the summit and moved to Hector; but, the bad weather continuing, I decided to suspend operations, and on October 17th we started by the tote road for Morley. We reached there on the 23rd, and I delivered my horses and outfit to the care of Mr. T. E. Wilson.

My work of this year covers five hundred square miles, which I expect to map this winter.

We made forty-three ascents of mountains, from eight to over ten thousand feet above the sea, and moved with our outfit more than four hundred miles along pack-trails.

I took three hundred photographs, which I am happy to be able to state turned out very well.

I reached Ottawa on the 29th day of October.

I have the honour to be, Sir,

Your obedient servant,

J. J. McARTHUR,

*D.L.S.*

## No. 5.

## REPORT OF A. DRISCOLL, D.L.S.

SURVEYS IN NEW WESTMINSTER DISTRICT, B.C.

NEW WESTMINSTER, B.C., 31st December, 1891.

E. DEVILLE, Esq.,  
Surveyor-General.  
Ottawa.

SIR,—I have the honour to report that acting under instructions from you dated the 14th of April last, I commenced the season's operations by completing the resurvey of Township 15 east of Coast Meridian left unfinished last season. Although considerable change was effected in the boundaries of some claims in this township, yet I believe I may say that the settlers are now all quite satisfied to adopt the new lines which have been run.

The two weeks following the completion of Township 15 I was engaged at Lytton, in Townships 14 and 15, Range 26 west of the 6th Meridian, where I effected the survey of the lands adjoining several Provincial pre-emptions, and also performed some other minor work.

Returning from Lytton I commenced the survey of the foothills in Township 2, Range 29 west of 5th Meridian, and Township 26 east of Coast Meridian. Among these hills, as well as on Sumass Mountain where I went shortly afterwards, there is a large quantity of good arable land, partly cleared by the action of fire, needing but little work to place it under cultivation. Although the land is of first class quality it is so steep in places that it appears to be less adapted to growing cereals than for raising stock, especially sheep, this latter being one of the most profitable branches of industry in this country.

From Township 26 east of Coast Meridian I went to Township 3, Range 30 west of 6th Meridian, and connected the Dominion and Provincial systems of survey by running the 7th Meridian across the accessible part of the township.

I then proceeded to Sumass Mountain, and was busily engaged there and in the bottom lands in that vicinity during the following two months extending the township and section lines. These bottom lands had been settled upon for some time, but were only partly surveyed.

This completed the subdivision surveys of this season.

The last but one of the surveys performed was the renewing of the marks at points of the traverse of the Canadian Pacific Railway between the 7th and Coast Meridian. These being the starting points of all surveys of Dominion Lands in British Columbia, it is of great importance that they should not be lost; they were rapidly disappearing in this district, and I was accordingly instructed to mark them in the same manner as section corners, namely, with iron bar and mound. This work was completed at the beginning of December, after which I proceeded to Harrison River, and made a traverse of the left bank as far as Morris Creek, for the purpose of locating a small lake, called "Morris Lake," for the Fisheries Department, which is about erecting works for the better protection of salmon and to further their breeding. This was my final survey of the season, on finishing which I returned to New Westminster and paid off my party.

I have the honour to be, Sir,

Your obedient servant,

A. DRISCOLL, D.L.S.

## No. 6.

## REPORT OF J. VICARS, D.L.S.

SUBDIVISION SURVEYS IN KAMLOOPS DISTRICT, B. C.

CANNINGTON, 5th January, 1892.

E. DEVILLE, Esq.,  
Surveyor-General,  
Ottawa.

SIR,—I have the honour to submit the following report of the surveys performed by me during the past season in the Kamloops District.

On receipt of your instructions dated 31st July I immediately started for Kamloops, which point I reached on the 8th of August. After consulting Mr. Nash, the Dominion Lands Agent, with a view of ascertaining where surveys were most urgently required, I proceeded to Township 18, Range 9 west of the 6th Meridian, where I retraced the outlines of certain provincial lots lying in the north-eastern portion of the township. Having completed this I moved to the west part of the township, where I subdivided most of the land lying in the vicinity of Deep Creek. This section is occupied by squatters who were anxious to have the subdivision performed. I then went to Township 22, Range 16 west of the 6th Meridian and subdivided a small portion of it, and continued the work of subdivision in Township 19, Range 13 West of 6th Meridian, until the weather became too cold for further field operations.

Regarding the character of the district in which I was located I may say that, with the exception of the Spallumcheen Valley, the land is not first-class for agricultural pursuits. There is, it is true, some good land in the valleys, and even on the hills, but it is limited in extent, and serves only to raise sufficient fodder for wintering stock. The Kamloops District is, and, in my opinion always will be, essentially a cattle-raising country. Unlike most of British Columbia that I have seen, the hills and valleys in the Kamloops District are, to a great extent, only sparsely timbered, and hence are well adapted for grazing purposes.

Along the Spallumcheen River and the lower portion of Deep Creek, and southward towards Okanagan, there is a large tract of first-class agricultural land, equalling any in Manitoba or the North-West, and surpassing most of the land in Ontario. The greater portion of this was taken up years ago, and is now in a high state of cultivation. I did not see any minerals in the vicinity where I was employed.

Game is abundant; partridge, prairie-chicken, rabbit and duck, were very plentiful, and deer were seen almost every day.

In the matter of timber limits, this district cannot compare with the coast or other parts of British Columbia as to the quality or size of its timber, still there is an immense quantity of it available, which sooner or later must find its way to the markets of the East.

The lumber trade of British Columbia is at present only in its infancy; yet it is apparent that it is only a question of a few years at most when her lumber traffic must assume gigantic dimensions, and this comparatively dormant resource develop into one of her staple commodities of export.

I have the honour to be, Sir,

Your obedient servant,

JOHN VICARS, D.L.S.



## No. 7.

## REPORT OF OTTO J. KLOTZ.

## SURVEY OF AMBER LOCATIONS.

PRESTON, 4th November, 1891.

E. DEVILLE, Esq.,  
Surveyor-General,  
Ottawa.

SIR,—I have the honour to submit the following report in connection with my exploration and survey of amber locations on Cedar Lake.

## ITINERARY.

Two days after the receipt of my instructions, dated 25th July, 1891, I left for the field; before leaving I had a nineteen foot canoe built at Peterboro' and expressed to Prince Albert.

At Winnipeg some outfitting was done and a cook engaged.

On the night of the 4th of August we reached Prince Albert, where the necessary supplies were obtained, also a pilot. Before leaving here a time observation was taken for comparison with similar ones along the Saskatchewan for approximate longitude determinations.

On Thursday evening, the 6th, we started in a driving rain on our 400 mile journey down the Saskatchewan. Our canoe was fairly well loaded, carrying twelve hundred pounds.

On the following day the pilot showed his skill by getting the canoe broadside into the rapids of Cole's Falls, the most dangerous rapids on the Saskatchewan excepting perhaps the Grand Rapids. As no work had as yet been done it was too early in the season to run any chances of drowning, so that pilot's services were dispensed with when Cumberland House was reached, and a satisfactory one obtained. It rained for days in succession, but this did not prevent our continuing on our journey, although thereby not so many observations were secured at night.

We covered on an average about fifty miles a day. The Hudson Bay Company post at Chemahawin, near the entrance of the Saskatchewan into Cedar Lake, was reached on Sunday morning, 16th August. The following day I proceeded to the initial point of the survey at Pesim Creek, which forms part of the south-eastern boundary of the Indian Reserve, lying between Cedar Lake and Muddy Lake. The irregular shore line, high water (two feet higher than in the spring), and fringe of willows necessitating the cutting of lines, impeded the rapid progress of the work. However, by 31st August the 12 amber locations of 1,500 feet meridional frontage were laid off, and the traverse survey carried some distance beyond, to absolutely barren amber grounds.

Returning to Chemahawin the Indian Reserve shore line, both on Cedar Lake and Muddy Lake, was examined for amber. Thereafter certain lakes to the north of the Saskatchewan, where amber had been seen or reported to have been seen by Indians, examined, and a compass and time survey made of the route followed. I returned to Chemahawin by various channels and lakes to the south of the river, examining and mapping on the way.

Latitude observations were taken at Chemahawin and near the terminal point of the survey on Cedar Lake.

Having completed the prescribed work I set out for the return journey. For economy in time and expense I had previously arranged for a fishing steamer to call for me at Grand Rapids for transport to Selkirk, instead of taking the fortnight's journey up stream to Prince Albert again. I arrived at Grand Rapids a few days before the appointed time in order that I might obtain time and latitude observations.

I obtained here a few pieces of broken pottery which were found, together with some skeletons and deer-horn implements, by the Indians while digging a hole for storing next season's seed potatoes. Their date must be pretty old, for the present generation of Indians here knows nothing, not even by tradition, of the art of pottery.

On the 20th of September the steamer should have arrived, but didn't, which perhaps was not very surprising to any one familiar with Lake Winnipeg navigation. The steamer was nine days overdue before she put in her appearance. She had been for five days on the treacherous rocks in Playgreen Lake; had lost an anchor; and had wandered out of her course in coming from Warren's Landing to Grand Rapids in consequence of a defective or non-adjusted compass, which I found to be "out" about two points, or more than twenty degrees.

The run from Grand Rapids to Selkirk takes about forty hours, but we spent nearly a week pounding around the lake in snow storms, running on rocks, unshipping the rudder, and similar undesirable casualties.

On the 6th October West Selkirk was reached, and as that day's train had left and there being none on the following day on either side of the river I engaged a team and drove to Winnipeg. The following day was devoted to official business in Winnipeg, when I left for home the next day where I arrived on Sunday, the 11th of October.

#### THE LOCATION SURVEY.

The instructions were to make a traverse of part of Cedar Lake, and to plant posts on the shore where it is intersected by east and west lines fifteen hundred feet apart; the lots to be 1,500 feet by 600 feet.

The initial point of the survey was marked by a post planted in a stone mound on the extremity of the stony point lying between Pesim Creek and Cedar Lake. Across the creek is the Indian Reserve.

The survey was made with a 6-inch D. L. transit, and a Frodsham box chronometer for time observations, in connection with azimuth observations on Polaris at any hour angle. The linear measurements were made with a standard 100 feet steel band.

From the high stage of the water and the consequent narrow beach it was soon found impossible to make the traverse without cutting lines through the willows and reeds and even through woods in order to have not too short or undesirable lines.

The greater part of the shore line of Cedar Lake that falls within the survey has a stony beach of gentle slope, and is strewn with angular limestones and occasional gneissoid boulders. The whitish marly clay in which these stones are imbedded affords very unstable footing, its behaviour being similar to that of quicksand.

The action of the waves extends on the shore to a height of about three feet above the present level of the water. At this height we find stranded, almost everywhere on the lake, large sticks and trunks of trees brought down the Saskatchewan hundreds of miles. The bottom of bays is generally filled with tall reeds and rushes. At the entrance of the Saskatchewan into Cedar Lake silt has accumulated in the lake, especially on the southerly side of the current, and on this deposit reeds are growing in a depth of four to five feet of water. Westward of these reeds a large bay extends in which the water is perfectly clear, while that of the adjoining incoming Saskatchewan is muddy, the reeds having acted as a filter. In this area of reeds dredging will probably reveal a deposit of amber debris, of which more will be said hereafter.

There is a depression along the southern boundary of the Indian Reserve—Chemahawin—connecting Cedar Lake with Muddy Lake, and said to be an old waterway. Along this depression amber debris is found.

As the word "debris" will frequently be used, an explanation of the meaning in which it is used is given.

From my observations on Cedar Lake and adjoining country examined, I have invariably found the amber associated with woody debris, although the debris occurs



containing little or no amber. This debris consists of woody (ligneous not vegetable) matter, varying in size from sawdust to small pieces, about an inch long, like matches, with occasionally larger sticks. This material is what is and will hereafter be spoken of as "debris."

The colour of the debris when in the water is black, but when on the beach and dry has a light colour.

As neither the amber nor the debris when found on the beach or on the adjoining lake bottom is *in situ*, their persistent association is undoubtedly due to the equality (when the debris is wet) of their specific gravity, each being a little heavier than water. About half a mile from the initial point of the survey the first amber is met with in a shallow bay. The debris area is very small, about 175 feet by 100 feet and 9 inches in depth, showing a very small per cent of amber and all in mere grains. The woods, mostly swampy, adjoining Cedar Lake are low and not many feet above the level of the lake. At various points holes were dug in the woods, and invariably below a few inches of mould a marly whitish clay is met imbedded in which are small angular limestones and occasionally rounded granitic boulders.

From Pesim Creek to Point Charlotte, a distance of two and a half miles along the shore, no amber or debris is found save the small area just mentioned. The lake between these two points is shallow in low water, and a considerable part of the bottom is covered with debris to a depth of a foot or more. At present this debris is covered with a thin layer of grey blue mud, which is said to shift with the wind. This mud the Indians call "sturgeon food," as in it that fish obtains his food. In the winter in this shallow part the ice freezes to the bottom, and in the spring raises two feet of frozen debris, which for a time after the ice melts floats on the water and then again sinks. The debris found on the beach or shore has been blown and washed there by winds and waves, and by the same forces is restored to the lake, thus keeping up a continual wearing and grinding action, besides exposure to sun and air, and these conditions explain in a large measure the comminuted form in which the amber is found.

During my visit a storm (18th August) carried away probably one hundred tons of debris from the Amber Beach to be described later on.

At Point Charlotte the water is very shoal, and a small horse-shoe shaped bay divides the point. Along this bay there is a deposit of debris 180 feet long and 60 feet wide, with a depth of  $2\frac{1}{2}$  feet, below which rock is struck. The debris is all of the finer kind, like coarse sawdust. This appears natural, as the bay is very shoal and only the lighter and smaller pieces of wood and amber are floated ashore. The amount of amber in the debris appears equal in quantity to that found in the Amber Beach. From Point Charlotte onward or southerly the next three-quarters of a mile, the shore is comparatively barren of any debris, only handfuls, so to speak, being found among the stones strewing the narrow beach. We then find two small contiguous shallow bays whereof the beach and bottom are covered with debris. The debris beach is here 1,000 feet long, 100 feet wide, and 2 feet in average depth. The adjoining lake bottom is completely covered with debris for at least 500 feet from the shore. The debris is the continual sport of wind and wave.

A hole was dug in this debris beach, 60 feet north-east of the post between amber lots Nos. 4 and 5. At the depth of 3 feet 3 inches struck bluish sandy clay, and water ran in, being below the level of the lake. The first 14 inches were a mixture of coaly debris, fine, with thin layers of sand, then 2 inches of pulverized charcoal, after that 16 inches light coloured debris looking like rotted manure, the wood being much compressed and resembling bits of straw; however, on exposure the wood swells and again becomes round. Amber grains were found from top to bottom but no large pieces. A hole dug in the adjoining woods showed only the whitish clay with stone beneath a thin crust of mould.

A little over half a mile beyond the above bays we come to the Amber Beach, by far the largest deposit on Cedar Lake, in fact the only one that has apparently any commercial value, and even its value is not an easily demonstrable quantity.



This debris beach is 3,000 feet in length with a slightly south-westerly trend, is about 100 feet in width, and has a cut bank (of debris) of 2 feet at the northern end at Pegu Creek. The cut bank gradually diminishes towards the south, until it disappears near the southern limit of the debris beach. Outside of the cut bank there is a flat watery beach of debris 20 to 30 feet in width, but this width varies almost daily with the lapping of the waves.

The bank itself washes away, builds up again, ever subject to changes of shore-line. For 350 feet at least (so far as I could examine readily from my canoe) out in the lake the bottom is covered with the same debris. The debris beach rises gently towards the west where the crest has a fringe of willows, behind which there is a depression, bog, about 300 feet wide, to the spruce swamp and former shore-line. This depression is filled with debris, but no debris is found in the spruce swamp.

The water line of this amber or debris beach is not sand, but debris. The depth of the debris on the beach is at least  $3\frac{1}{2}$  feet, to which depth holes were dug, but the rapid filling in of the water from the lake prevented further digging, although at another foot or so undoubtedly the clay would have been reached.

There is more or less stratification in the debris as seen on the cut bank or in digging a hole, but this is simply from the action of the water, the strength or magnitude of the waves determining the particular kind of strata. I noticed that light gentle waves lapping the shore deposited fine stuff and coal dust. Occasionally a narrow band of white sand is found in the debris, but extending to no distance. There is always more amber seen on the surface than when an inch or more of the debris has been removed from the surface. This results from exposure and wind, the latter blowing the dry fine woody matter away, leaving the amber grains behind. Sometimes little ridges are seen a quarter of an inch deep, almost exclusively amber granules, which are nearly all smaller than a pea. The prevailing colour of the amber is brown or deep orange, although straw colour also occurs. Most of the pieces are clear; some however are dull and cracked, and easily crumble in one's fingers, a condition which never happens with clear pieces. Undoubtedly long exposure to sun and weather, and repeated washing and rolling about tend to disintegration. By an inverse order of reasoning, examining a handful of amber granules, we are led to the conclusion that many or most of them were part of larger or large pieces. The questions that then naturally suggest themselves are: Are there any more large pieces; where are they; and where is or was their original home?

These questions could not be solved in the limited time at my disposal, the greater part of which was occupied in doing prescribed geographical work.

That the amber and debris so far found are not *in situ* is obvious, and that the Saskatchewan has been the transporting agent seems also conclusive.

Amongst the amber granules are found many "drops," sometimes with slender stems still attached, the drops being the resin as it exuded from the tree. These drops are of the size of an elongated pea.

In bituminous coal and lignite fossil resin is found imbedded in a compact form, and the specimens of coal (from other localities) containing fossil resin that have been examined fail to show original drops as mentioned above. If the Cedar Lake amber were derived from the coal or lignite beds of the upper Saskatchewan, that coal would have to become disintegrated to admit of the amber being floated away. By this disintegration the coal itself would be subject to transportation, but so far none has been found on the lower Saskatchewan. It seems therefore highly improbable that the Cedar Lake amber has been derived from any coal or lignite beds.

Looking at the plan of the survey made of part of Cedar Lake, one is struck with the apparently unfavourable configuration of the shore line at the Amber Beach for a deposit of debris to be made. The direction of the current of the lake from Point Charlotte is a little south of east, and a north-easterly wind is necessary to bring any debris to that beach. Direct observations have as yet not been made

in this isolated region to establish the direction of the prevailing winds during the open months.

It is a significant fact that no debris or amber has been found on the north shore of Cedar Lake.

The Amber Beach was discovered by Mr. W. C. King, Hudson Bay Company's officer at Chemahawin, in 1889, since which time he and Mr. R. MacFarlane, Chief Factor at Cumberland House, have worked at the beach obtaining amber for samples by winnowing the debris when dry, then washing, drying and winnowing again to free the amber from small particles of wood. They are the only persons who have done actual work on Cedar Lake in order to test the practicability of working the amber field. Their method is primitive, slow and expensive, but the only one by which, under the circumstances, without tools or machinery, the amber could be obtained.

They have also dug two pits in the spruce swamp, west of the Amber Beach in the hope of finding the amber in its bed, but so far have not succeeded, and I have no hope that they will find it there.

The shafts are about 800 feet west of the lake, and 350 feet apart. The one shaft is 9 feet in diameter and 20 feet deep, and with the exception of a few inches of moss and mould passes through whitish stiff clay, with angular limestones of all sizes and odd granitic boulders, material just the same as is met with on the present beach and shore of the lake. This shaft filled up with water to within about 8 feet of the surface, which is about that much above the lake level. On account of water work on this one was abandoned, and another one of the same diameter started. At the time of my visit this was sunk 7 feet, and through the same material as the former. Small pieces of yellow ochre were found in each shaft.

Besides working on the amber beach and sinking shafts, Messrs. MacFarlane and King have also made an effort to dredge off the beach. Their dredge consists of an iron frame  $9\frac{1}{2}$  in. by 27 in., to which is attached a conical bag net  $5\frac{1}{2}$  feet long. The dredge is taken out in a canoe about 120 yards, at which distance the water is about 5 feet deep, and then with difficulty hauled in by five Indians. The largest pieces of amber yet found (and they are not large, weighing possibly one-half ounce) were found by the dredge.

While at Grand Rapids, on my return journey, an auger with extension rods arrived for Messrs. MacFarlane and King, with which they intend to make borings in various places for the looked-for amber stratum.

Two lot lines fall on the Amber Beach, and at the mounds surrounding the posts marking the lots holes were dug in the debris to the depth of five feet, when the rapidly gathering water percolating from the lake stopped further digging. In these holes sticks and logs were encountered, the latter similar to those lying on the beach all along the lake.

Whether the debris is the remains of the resin-bearing forest, to what species of trees it belongs, and what story the impressions found on some of the pieces of amber reveal, are questions to which, from pressure for returns of my plans and report, no attention could be given.

After rounding the small stony peninsula south of the Amber Beach we come to a land-locked bay full of debris on its north, west and south sides, but this debris is of quite a different nature from the true amber debris. There is very little woody matter in it; it is spongy and composed almost exclusively of chopped and broken reeds and rushes. In my search there for amber only two grains were found.

The shores for 150 to 200 feet (to the willows) are very miry and composed of the same material—spongy debris.

About a mile beyond or southward of this bay we reach the south limit of the twelve amber locations that were laid out. The traverse survey was continued about two miles farther. In this distance of three miles the lake is exceedingly shallow and full of reefs; there is no amber debris found worth mentioning, although of the spongy debris—barren of amber—there is quite an accumulation on the shore immediately south of Lot 12.



## INDIAN RESERVE EXAMINATION.

I made a careful examination along the Indian Reserve at Chemahawin. With Indian Reserve map in hand I followed every foot of the shore line, digging pits where encouragement was given for finding debris, and noted the nature of the beach between the survey points as designated and shown on the above map.

Without going into the monotonous detail of following from point to point, it may be stated that there is no large deposit of debris along the reserve. The bottom of the bay between survey points 24 and D is filled with debris; on the shore there is little, but what there is shows fair "colour," no dust, but all granules a little smaller than peas. The dry debris beach is here about 300 feet long, 25 feet wide, and has an average depth of 10 inches, below which we find stones and clay.

On the Muddy Lake side of the reserve there is practically no amber at all.

The Indians through some means have now got very exaggerated ideas about the value of this amber. When one of them finds a small handful of grains he believes himself entitled to a very handsome reward therefor.

The Indian has learned the art too of "salting" a mine. He will strew amber at some new locality, then come in and exhibit samples of the new "find." After a donation of bacon or flour or tobacco he reveals to the "monias" the place—Tableau. I speak from experience.

The old women take a hand at this too.

On the north side of the Saskatchewan, at Chemahawin, some amber dust is found scattered on the marshy shore, also a little on some of the islands embraced within the reserve.

## THE EXPLORATORY SURVEY.

After completion of the location survey and examination of the Indian Reserve, I left Chemahawin in my canoe accompanied by two Indians and ascended the Saskatchewan to Moose Lake River, which we ascended for several miles to the Forks, then entered a bewildering network of streams and channels, expanses and lakes, making the survey by noting prismatic compass readings and time intervals, the latter being afterwards converted into linear measure on the assumption of one minute equalling four chains or one hour three miles. It is an exceedingly dreary region—sky, water and rushes compose the landscape or more appropriately waterscape. At times a few trees may be seen on the horizon, or the more frequent willow bush. We are here in the silt area of the Saskatchewan covering several thousand square miles, and which is described in my Exploratory Survey to Hudson's Bay report of 1884.

The first debris was found in Lobstick Bay, an irregular expanse of several miles. The debris showed very little amber. The peninsula separating the two large bays is said to be in the old bed of the Saskatchewan. There is no connection of this lake to the north with Moose Lake River as would naturally be surmised.

A mile beyond Lobstick Lake we enter Lake Dewdney, the shore of which was examined. At the north-western side of the lake there is a debris beach about half a mile long and 70 feet wide, which was also discovered by Mr. W. C. King. The adjoining water is full of debris too. On the beach several holes were dug. Two feet beneath the surface of the debris we struck frozen ground of clay and reeds (8th September). The surface debris near the water line looks newer than that back on the beach, being apparently mostly bark of a reddish tinge, and looks like tan-bark. In a few spots on this beach the amber is sufficiently thickly strewn to be hand-winnowed; otherwise the debris is not rich in amber, yielding about 25 per cent of that on Cedar Lake. Lake Dewdney the Indians say lies in the old bed of the Saskatchewan. There is not a stone on the shore of this lake.

A half hour's paddle from here brings us to the mouth of a crooked river which we ascend for a little over an hour and then enter Lake Macdowall. Near the entrance we find debris but no amber. We coast along and examine the shore up to the large debris beach behind a 300 feet fringe of reeds and rushes at the north-



western part of the lake. The debris here is clean wood debris and very encouraging to the eye, but only after persistent looking and searching did I find three grains of amber. This beach is nearly a mile long; behind it is a marsh.

The next place visited was one from which great things were anticipated, as the old Indian councillor had told me that he had found large pieces of amber there seven years ago,—amber varying in size from a pipe bowl to a fist. After much importuning and making all sorts of promises, provided he showed me such large pieces on the ground, he finally divulged the locality. I gave him paper and pencil and he drew a rough map of the place relative to our camp. He made what was to be a startling statement, that at the place in question there was no debris, but only mud. This was something new, for hitherto amber had only been found associated with woody debris. The next morning we started off for the El Dorado, paddling up rivers and creeks, across lakes and expanses, and finally up a channel five feet wide through reeds, until we reached a mud flat partly covered with moss and bunches of marsh grass. This was the spot. We all started looking, digging with hands and spade, but no one found or saw anything save the old Indian who found three pieces the size of a pea.

It is not pleasant to doubt a man's word, but circumstantial evidence encouraged the belief that those three grains previously rested in the Indian's pocket. I was not much disappointed, for I had seen similar stories disproved.

By ascending the MacFarlane River we again reached the Saskatchewan, which we descended to the channel leading off to the south about a mile below Kettle Island. We wandered through a network of waters into Muddy Lake where another debris beach, showing a fair percentage of granular and dust amber, was found on the north shore, about two and a-half miles west of Chemahawin.

This completed the circuit of the exploratory survey. No amber beach was found equalling in volume of debris or quantity of amber the Amber Beach.

The interesting facts were discovered that the amber debris is very widely scattered, and the belief that the Cedar Lake amber came down the Saskatchewan was fairly substantiated.

Grains of amber have been found on Pine Island Lake, right at the Hudson Bay Company's post at Cumberland House; also on Moose Lake near the Moose Lake River. On this latter lake the Indian chief is said to know of a place where very large pieces are to be found, but experience has taught one to be cautious—in believing.

The exploration, if it did not find any valuable amber deposits, gathered some facts at least, and added some new geographical features hitherto unknown to our maps.

#### THE COMMERCIAL VALUE.

The value of amber depends on its physical properties and characteristics, size, colour and hardness, and not on its chemical composition.

The amber of commerce has been derived from the south-eastern Baltic (although it occurs in other parts of the world) for the past twenty centuries.

The amber on the Baltic is obtained by mining, dredging and diving. The mines are situate near the sea shore at Palmnicken near Fischhausen, while the dredging is done at the more northerly place Schwarzhort. The mines are worked day and night all the year, and the amber-bearing stratum, known as "Blaue Erde," of a thickness of about four feet, is below the level of the sea. As the shafts and drifts pass wholly through sandy material the mines are heavily timbered. The Blaue Erde, which also contains woody debris, when hoisted is washed down a chute across which are stretched nets of different sized meshes. By this means the first rough assortment of the amber is made; the pieces vary in size from a pea to the size of a hand. The depth of the mines is about 100 feet. The material obtained by dredging, in which twenty to thirty dredge ships are engaged, is treated in a manner

similar to that from the mines. Diving is done with appropriate diving apparatus. The diver receives, besides his regular pay, a premium for each piece of amber he finds weighing above a certain number of grammes.

The prevailing colour of the Baltic amber is yellow; some of it is as transparent as crystal, and some clouded or opaque. The clouded variety is the most highly prized at present, but is dependent on public fancy for that position.

The annual product of the Baltic fields is about 350,000 pounds. The Prussian Government has found through centuries of experience that the public interests are best served when the whole amber industry is under the management of one concern (now Stantien and Becker of Königsberg), which pays a royalty or specified rate on the product obtained. At present the government's revenue is about 300 marks daily. The whole work there is under the direct supervision of the government.

In the market the amber is sold by the pound, but the price is especially dependent upon the size of the pieces. At present the price per pound is \$15, 4 pieces to the pound; and so on downwards to 90 cents, 160 pieces to the pound. The latter is the smallest size used for manufacturing purposes. Waste or granular amber is worth about 9 cents a pound.

The United States import only amber suitable for manufacturing. The granular and impure amber is "roasted" in Germany and sold as varnish stock.

A process has been discovered whereby small clear amber pieces and manufacture chippings can be compressed into tablets. These tablets, as found in the market, are  $6\frac{1}{2} \times 3\frac{1}{2} \times 1\frac{1}{4}$  inches, and are worth \$10 a pound. This amalgamated amber, called by German manufacturers *ambroid* and by American manufacturers *amberine*, is said to be in every respect of as good quality as that in natural pieces. One difficulty of its production is the exclusion of all air from the material to be compressed; this causes cracks and rents in the interior of the tablet, not easily discerned from without, which explains why it is worth less per pound than the amber in natural large pieces.

In making an estimate of the approximate value of the amber on that part of Cedar Lake surveyed, account must be taken of the cost of procuring the amber from the debris, otherwise the estimate will be wholly misleading,—the game may not be worth the powder.

From the holes dug to the depth of four feet on the amber beach several bushels of debris were obtained, also several bushels of dry surface skimmings.

It is a somewhat difficult and tedious operation determining the amount of amber in pounds per volume of debris. Were the amber in pieces instead of minute grains and dust the work would be comparatively easy.

My examination gives the following results;

1 cubic foot of dry surface debris .....	weighs 18 lbs.
1 do do of amber granules .....	do 41.7 do
1 do do of surface debris contains of amber granules and dust.....	do 4.7 do
1 do do of debris from holes dug in debris contains from 10 to 40 per cent of the amber contained in surface debris, or on an average.....	do 1.2 do

Applying these figures to the deposits we have

	Volume cubic feet.	Amber. lbs	Value.
Point Charlotte deposit 180' x 60' x 2'	21,600	25,920	\$2,333
Station 15-16 do 1,000 x 100 x 2	200,000	240,000	21,600
Amber Beach do 3,000 x 100 x 4	1,200,000	1,440,000	\$129,600

Total..... \$153,533

This is valuing the amber at the lowest market price, that paid for varnish stock.



This volume and value may easily be doubled or trebled by the debris we see on the lake bottom adjoining the Amber Beach. But with this the additional cost of dredging would come in.

The above \$150,000 is the approximate value of the amber were it in the market, but instead of that it lies buried on the shores of Cedar Lake.

By the present primitive method one man can winnow and clean, providing the weather is fair and the debris dry, from 8 to 10 lbs of amber a day, representing a value of less than a dollar.

In the Baltic such small amber is a side product, and until only quite recently was little or not used at all; but on Cedar Lake it is *the* product, large pieces having not as yet been found, although possibly one per cent of the amber now found will yield pieces that may be utilized for the smallest kind of manufactures.

The prevailing colour of the Cedar Lake amber is not that which the market at present demands.

Although amber pieces are and can be compressed into tablets of ambroid and amberine, yet for that purpose the amber from Cedar Lake is not adapted, being too small, associated with impurities, and lacking uniformity of colour. Thus its market is narrowed down to furnishing, after being roasted, varnish stock. Whether it would pay to roast the amber here or ship it to the factories of Germany and England, experience alone can tell. But the greater question—Can the amber, whereof we know on Cedar Lake, be successfully worked as a business enterprise?—is one which I fear no one is in a position to answer positively.

The Cedar Lake find is not an *a priori* demonstrable bonanza.

That a stratum exists containing amber in larger pieces there can be little doubt; although from the many small pieces found, which are still in their original form as they exuded from the tree, it is not probable that the resin-bearing trees furnished such large exudations as those of the Baltic.

Capital, enterprise and specific knowledge of the amber industry are essentially necessary to solve the questions connected with the Cedar Lake and neighbouring amber fields.

The region in which the amber occurs is totally valueless to the Government. It can be reached either by going to Prince Albert by rail and then descending the Saskatchewan in a canoe 400 miles, or one can take a fishing steamer from Selkirk to Grand Rapids about 300 miles, and cover the remaining sixty odd miles by canoe.

It is undoubtedly the greatest "rat" country on the continent, having furnished as many as 200,000 muskrat skins in a year. Hence it would be most desirable if an industry could be created, and an industry too that would directly contribute to the Federal treasury. Such an industry would probably relieve the Government also of some of the burden of supporting the Indians there, as some of them would undoubtedly find employment at the amber works.

Without even taking the experience of the Prussian Government into consideration, which gives the whole right of amber search to one concern, the circumstances obtaining at Cedar Lake suggest that, if these apparent treasures are to be explored and exhumed for the mutual benefit of the Government, the public, and the company or person undertaking the task, the right of search and working any amber field be given exclusively to one reliable and responsible concern, paying a percentage or royalty on the annual output of amber, and subject to such regulations as the Government may deem wise to make.

Amber fields cannot be treated as placer mines, and parcelled out into small lots. The plant required for the former is very much more expensive than that for the latter. The experiment to ascertain if there is really anything of commercial value there cannot be successfully made on a small scale, and hence capital will not likely undertake a project encircled by restrictions that may strangle the very creation of a new industry.

So far as the Government is concerned no pecuniary loss can result to it by granting the above right to one concern, instead of to half a dozen or more limited



rights; in fact it will be easier to deal with and collect dues from one than from more; and it is likely that one company will do more to develop the industry thoroughly than a number would, working on restricted areas.

Should in this now unproductive and worthless region an amber industry be established, the freight created thereby will assist the shipping interests of Lake Winnipeg, and contribute towards the maintenance of the Hudson's Bay Railway that is expected to cross the Saskatchewan at Grand Rapids, thirty-five miles east of Cedar Lake (Rabbit Point).

Summing up the data: There are tons of granular amber buried on Cedar Lake. Whether it will pay to gather it has as yet to be demonstrated; but if liberal concessions be made exclusively to one party or concern there is a hope at least that capital and enterprise will be utilized in thorough exploration in this otherwise unproductive region.

The observations for latitude and longitude have not yet been computed. The results will be embraced in the final report.

All of which is respectfully submitted.

I have the honour to be, Sir,

Your obedient servant,

OTTO J. KLOTZ,

*D.T.S.*

## No. 8.

## REPORT OF J. I. DUFRESNE, D.T.S.

## SURVEY OF TOWNSHIP OUTLINES NEAR JACK-FISH LAKE.

MONTMAGNY, 2nd July, 1890.

E. DEVILLE, Esq.,  
Surveyor General,  
Ottawa.

SIR,—I have the honour to submit the following general report upon my operations for the survey season of 1889.

I left Montmagny on the 8th of May and reached Winnipeg on the 13th, having spent one day in Ottawa to have my instructions completed.

I left Winnipeg for Moose Jaw on the 17th of May, and on the 27th, my outfit being all completed, I started from the latter place to reach the field of my operations.

The trail from Moose Jaw to Carlton passes through a very dry country; and my ponies were very heavily laden, 1,200 lbs. or 1,300 lbs. in each cart, so that it was not till the 5th of July that we reached Saskatoon.

On the 8th we arrived at Carlton and on the 11th at Muskeg Lake.

On the next day I started my work by commencing the survey of the north boundary of Township 45, Range 8 west of the 3rd Meridian.

Here follow some descriptive notes on the townships I partly outlined.

*Township 45, Range 8.*

This township appears to be mostly covered with a thick growth of poplar from six to twelve inches in diameter.

Sections one to twelve are, however, only partly covered.

The soil is a sandy loam of pretty good quality, but the country is so broken in the northern part that it is classified there as class 2 to 2½.

*Township 46, Range 8.*

I have explored only the southern part of this township.

The character of the country and quality of the soil and timber seemed to be the same as in the preceding township.

*Townships 45 and 46, Range 9.*

About one-third of these townships is covered with scrub and some poplar in bluffs.

The soil is of a better quality than the preceding and the country is not so broken.

Part of these townships is good hay land.

In Township 45, Range 9, are located two lakes of pretty large dimensions.

*Townships 45 and 46, Range 10.*

Scrub and dry brush, together with small poplar, cover one-third of these townships.

The soil is not very good. Some surface stone is seen on the tops of the hills and very light sandy loam is noticed in places.

*Townships 45 and 46, Range 11.*

These townships are very much the same as the preceding, but surface rocks are more plentiful.

The soil is very good in some places, while elsewhere it is very poor.

The country is rolling and some bluffs of poplar and scrub are scattered here and there.

*Townships 45 and 46, Range 12.*

The greater part of these townships lies in a nice flat, between two ridges of hills. The part on the hills is barren or nearly so, the soil being very poor sandy loam.

There is a large coulée on the east side of the flat which would furnish good shelter for cattle in winter, the hollow being covered with poplar and willow scrub.

A nice creek runs in this coulée. On the west side of the flat a large muskeg is met with. The soil in the flat is a good black loam; very little scrub and a few bluffs of poplar are seen.

*Townships 45 and 46, Range 13.*

The county here is very hilly, the hills being from 40 to 100 feet in height and their summits being partly covered with surface stones.

It is a remarkable fact that the north-east side of nearly every hill is covered with poplar, whereas the remainder is bare. There is scrub in the hollows. Some of the land, however, in these two townships would be fit for farming.

In the south part of Township 46, Range 13, a nice creek runs through a flat of very good land.

*Townships 45 and 46, Range 14.*

These townships are very hilly, the hills being from 40 to 100 feet in height.

The soil is a poor sandy loam with sand for subsoil. A few bluffs of poplar are scattered here and there.

*Township 47, Range 13.*

The southern part of this township is nearly all open hilly country. The hills not over 100 feet high are covered with stones.

The northern part is rolling and hilly, and is partly covered with dry poplar and willows. Very few bluffs are green; the next fire in this region will open the country completely.

The soil is sandy loam, good in the northern part, poor elsewhere.

*Township 47, Range 14.*

The southern part of this township is partly level and partly hilly prairie.

There are bluffs of small poplar on the east side of the hills.

There is a good stretch of level land lying from Sections 4 and 5 in a northerly direction. The soil is sandy, and is only fit in places for agricultural purposes.

The northern part is rolling and hilly, and is partly covered with dry and green poplar.

The soil here is somewhat richer than in the southern part.

*Township 48, Range 13.*

The country here is generally rolling, although hilly in places. The soil is a fair sandy loam with sand for subsoil.

This township is partly covered with dry poplar and willow. Very few bluffs are green; the next fire will open the country completely.



*Township 48, Range 14.*

The country here has the same general appearance as in the above township; the green bluffs, however, are more numerous.

A nice creek running south is crossed in Section 4.

*Townships 47 and 48, Range 15.*

Same description of country as in the above township. A fine lake of fresh water lies in Section 1, Township 48, and in Section 36, Township 47.

In Section 33, Township 47, and Section 4, Township 48, a creek is crossed flowing south.

This creek is from two to three feet deep and is about half a chain wide.

A few bluffs of large poplar were also seen.

*Townships 47 and 48, Range 16.*

The country here is hilly, with sandy loam soil.

Surface stones in quantities are seen here and there. Some bluffs of poplar and willow scrub are scattered throughout.

*Townships 47 and 48, Range 17.*

Jack Fish Lake covers the greater part of these townships.

The shore line of the lake intersects the north boundary of Township 47, Range 17 at one mile and thirty chains from the north-east corner of the township.

The water is good, clean and fresh. The banks on the east side are of fine loose sand. That part of Township 48 not covered by the lake seems to be very hilly.

*Townships 49, Ranges 17 and 18.*

Jack Fish Creek is crossed on the middle of the east boundary of Section 12, Township 49, Range 18. This creek is about 30 to 40 links wide and from 2 to 3 feet deep; it runs through an open flat, one mile in width.

This flat, the soil of which is first-class, lies between two high banks and has a north-westerly direction.

Jack Fish Creek abounds in jack fish of generally small size. Some of them, however, weigh about three pounds.

The water of the creek is clear and fresh.

*Townships 50, Ranges 17 and 18.*

These townships are level, but are cut by numerous coulées, each of which has a small running stream in the bottom. The east part of Township 50, Range 18, and the west part of Township 50, Range 17, are partly covered with large bluffs of poplar, a few clumps of spruce and much willow scrub.

*Townships 49, Ranges 16 and 17.*

The east part of Township 49, Range 17, and the west part of Township 49, Range 16, are far more wooded than the above.

A coulée of 100 feet deep with a nice running stream in the bottom is crossed on the east boundary of Section 12. The rest is level country. The soil is good and is for the most part covered with dry poplar and a thick growth of young poplar.

*Townships 50, Ranges 16 and 17.*

Level country, more than half covered with poplar from 2 to 12 inches in diameter, scrub and dry brush. Some larger poplar is seen in places.

The country extending on each side of the line run seems to be dry for a good distance. The soil is of good quality.

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*Township 49, Range 15.*

The northern part of this township is a good sandy loam. The southern part is poor soil.

The country is rolling and more than half is covered with bluffs of poplar and willow.

The largest trees are from 20 to 24 inches in diameter and the average is from 6 to 10 inches.

*Township 49, Range 14.*

The country here is much more level than in range 15 ; the wood is thicker and the soil a much better kind of sandy loam.

*Township 50, Range 15.*

This township is for the most part level.

Over half is covered with poplar from 6 to 15 inches in diameter, scrub and brush. The soil is a good sandy loam.

*Townships 48, Ranges 6 and 7.*

The northern part only of these townships was explored, and was found to be hilly and rolling country all covered with small timber, averaging from 8 to 15 inches in diameter, and consisting of jack-pine, poplar and spruce.

Now to proceed with my report of operations I must add the following notes.

By the 6th August the smoke became so dense that I could not see my flag-staff at the distance of three or four chains.

I had with much difficulty arising from the same source completed on the previous day the survey of the east boundary of Township 49, Range 14.

On the 19th which was Monday the smoke was at least as bad ; but the weather had an appearance of rain, so that, hoping to see it clear up after the rain, we waited until next day. On the 20th no rain had fallen, and the signs thereof had disappeared, and the smoke being worse than ever we left that district in order not to remain idle any longer, and returned to Muskeg Lake.

Fire was raging there also, but the smoke was not so dense.

We continued our work fully determined to push it on more than ever. The flies having disappeared work was progressing favourably when on the 29th August I accidentally cut my foot very seriously with an axe. Owing to this accident, aggravated by the want of proper medical treatment, I was forced to abandon the survey, and was completely unfit for any work until the 22nd day of March last.

I have the honour to be, Sir,

Your obedient servant,

J. I. DUFRESNE, D.T.S.

## No. 9.

## REPORT OF W. S. DREWRY, D.L.S.

## TRIANGULATION SURVEY IN THE ROCKY MOUNTAINS.

OTTAWA, 5th March, 1892.

SIR,—I have the honour to report on the triangulation survey of the railway belt in the Rocky Mountains, and to submit the appended map embracing about 2,000 square miles of the Rocky and Selkirk Mountains, a considerable portion of which area has not been previously mapped.

In accordance with your instructions dated the 1st June I left Ottawa and proceeded to Calgary, where the necessary additions to our outfit of the previous year were made, and a few men engaged. I then went to Morley, hired the men necessary to complete my party and received the horses left there at the close of the preceding year's operations.

The mountains were entered by the Bow River Pass, which we followed to Canmore. On arriving at this point the party was divided as during previous years, the observing party being placed in charge of Mr. Saint Cyr, Dominion Land Surveyor, and sent on into the mountains.

The first work performed by the party under my immediate charge was the survey of a road from Canmore to the boundary of the Rocky Mountains Park. Owing to the broken weather this work occupied five days, including one spent in going over the trail with the trail commissioner for the Calgary District.

We then camped at Castle Mountain and observed a programme of star transits for azimuth in connection with the triangulation. The Bow River Pass was followed from Castle Mountain to Laggan where we turned aside to go down Hector Pass.

Here I must remark on the great change which is taking place in the Bow Pass. During the last five years I have observed it closely, knowing it previously by report. Only ten years ago camping ground where good feed could be obtained for horses was comparatively scarce, while now it can be found at almost any point. It appears that this has resulted from extensive fires, which, sweeping over the country, have seemingly burned so fiercely as to destroy the seed and growth of black pine, spruce and poplar; and grass has gradually covered the surface. Much of the timber now standing is dead and dry, so that when another fire passes over the valley it will practically be prairie.

Considerable difficulty was experienced in crossing the various streams intersecting our route; indeed, the great storms of September and October, 1890, had left such a quantity of snow on the mountains as to render work hazardous as late as the 15th July, 1891; and the melting snow kept the streams up to such an abnormal level that fords which had been hitherto crossed with ease were now impassable, necessitating considerable risk and expenditure of time in finding others.

While we were pushing on into the mountains the observing party occupied Fatigue Mountain and Bonnet Peak Stations, but were compelled to leave their work incomplete at the former owing to the signal at the latter, although some nine feet high, being still buried in snow and hence invisible from Fatigue Mountain.

They then occupied Hector and Storm Mountain Stations, while we went up Beaverfoot Valley from Leancoil and set a signal on the Brisco Range.

Previous to this year only a single chain or net of triangles had been made; but, in order to cover the railway belt through the unmapped and little known Selkirk Mountains, it was deemed expedient as a matter of economy to carry a double triangulation chain from the summit of the Rockies westward. This caused an apparent slight decrease in our rate of advance westward, but has put the work in such



a condition that another season's operations will no doubt show an increase for both periods. After the first two signals of a single chain of triangles are placed in position every signal set makes an additional triangle; while in a double chain, the first three signals being established, every three additional signals set give four triangles, so that one-third more area is covered and the cost per square mile correspondingly diminished.

From the Brisco signal we returned to Leancoil and made the passage of the Wapta Cañon to the Columbia Valley. No pack train has been over this route for eight years and in consequence it was extremely difficult to get through. Near Muir's Tunnel, on the Canadian Pacific Railway, we climbed high up on the mountain side following the old tote road which had been cut along the faces of cliffs in many places; but at some points rock and mud slides had swept away the road. Where this had occurred we were compelled to take a pick and dig a track about a foot wide upon which to cross the horses. We could see that they fully realized their danger, but all behaved well and we reached Golden at the mouth of the cañon safely.

#### COLUMBIA VALLEY.

The Columbia River issues from the Columbia Lakes in about latitude  $50^{\circ} 30'$  north, then runs north-westerly upwards of 150 miles, then turning sharply to the south-west sweeps around until it flows east of south into United States territory. Extending southerly in this "Big Bend of the Columbia," as it is called, lie the Selkirk Mountains.

The Canadian Pacific Railway enters the valley from the Wapta Cañon at Golden about 70 miles from the Columbia Lakes. It then follows the easterly side of the river 17 miles to Donald, near which place the Columbia is crossed; then following the westerly bank it passes through the Cañon of the Columbia, emerging at Beavermouth. The railway then turns up Beaver Creek Valley and follows it south-westerly to Bear Creek, up which it goes to the summit of the Selkirks, where it enters the Illecillewaet Valley and traverses it to its mouth at Revelstoke. At this point the railway again crosses the Columbia Valley and enters the Eagle Pass.

Steamboats ply on the river from Golden to the lakes, and the Provincial Government are building a substantial waggon road between the same points. The Government have also made good pack trails to several points where a development of mineral wealth is promised.

From Golden we travelled down the Columbia Valley, 10 miles to Blaeberry Creek, a fine stream about 25 yards wide which heads with the Saskatchewan River in the summit range of the Rockies. Its valley is the Howse Pass which came into prominence at the time of the Canadian Pacific Railway survey. We followed it some 12 miles from the mouth and set two signals, one on the range next the Columbia and another at the extreme distance to which we penetrated. The first six miles of this trail are tolerably easy; but beyond that windfall is piled up to such a height as to render it difficult to get through on foot without chopping.

There has been a very large amount of valuable timber in the vicinity of this stream, but a considerable quantity has been cut off or destroyed by fire.

We saw numerous goats on the mountains along the Blaeberry which, contrary to expectation, were not very shy, some of them permitting open approach to within two hundred yards.

Upon completing our work in that locality we retraced our steps to Golden where I detached one man and sent him to assist Mr. Saint Cyr, who required his aid in making the severe climbs from the Wapta Valley. My own party then went up the Columbia Valley and set a signal on the Brisco Range further south than the one placed from the Beaverfoot.

In that portion of the Columbia Valley traversed by us, extending from Beavermouth some sixty miles up the river, there is comparatively little arable land. Somewhat extensive flats lie along the stream but are flooded until late in the summer or

fall; some of them nevertheless produce an abundance of grasses. It seems doubtful whether these lands can be successfully dyked, owing to streaks of a species of quicksand extending to an unknown depth. However, upon close examination, it may prove that such a condition does not exist everywhere; if this is so, then the land so reclaimed would in all probability become very valuable for agricultural purposes.

In the vicinity of Golden are several farms (or ranches as they are locally known) upon which, I am informed, grain of various kinds, and cabbages, turnips, beets, onions, &c., are successfully produced without irrigation. I saw several car loads of very fine cabbages shipped to different points, and also samples of other produce. It occurred to me that the hardier fruits might be grown there with a flavour more nearly approaching eastern fruit than that produced at lower altitude and in a softer climate. It also struck me that it might be profitable for persons conversant with grape culture to examine the benches and slopes along the easterly side of the Columbia Valley, and at the same time look into the matter of temperature, with the object of finding out the suitability of that district to the production of grapes. If the matter of climate and temperature is right, the land in question seems to be admirably adapted for this industry.

In the Columbia and higher valleys tributary thereto a variety of berries was observed. Nowhere else have I found the wild raspberry growing to such a size and so luscious. It struck me as a curious fact that this fruit was not found until an elevation of 5,000 feet above the sea had been attained. It was suggested that probably at lower elevations the undergrowth was so rank as to stifle the growth of the berry bushes; this perhaps explains it.

Most of the valuable timber in this valley appears to lie west of the Columbia, and is, I believe, already under license. In addition, a very large quantity of what is known as "tie timber" exists and but little else was passed through by us.

Our work bordering this part of the valley being completed we swam our horses across the Columbia at Carbonate Landing, some 17 miles above Golden, crossed our outfit in a boat and entered the Selkirks. A description of the topography of a part of this area may assist in following our movements.

#### SELKIRK MOUNTAINS.

Commencing at the Canadian Pacific Railway near the mouth of Beaver Creek, the Dog Tooth Range of mountains extends south-easterly in an almost unbroken wall about thirty-six miles along the western side of the Columbia Valley to a point some four miles south of Golden.

Quartz Creek, some twelve miles in length, flows northerly along the westerly base of this range into the Columbia River, about one and a quarter miles above the mouth of the Beaver. Cañon Creek heads just south east of Quartz Creek, but flows south-easterly and bends around the end of the Dog Tooth Range, where it receives a tributary from the west, and then discharges into the Columbia about seven miles above Golden.

West of Quartz Creek, between it and the Beaver, is a range of mountains rising from 7,500 to 9,000 feet above the sea, which, turning to the east around the head of Quartz Creek, again turns south-easterly and, dividing the waters of Grizzly Creek and the north fork of the Spillimacheen on the west from those of Cañon Creek on the east, then forms the westerly limit of the Columbia Valley for upwards of thirty miles. This range gradually lowers from Cañon Creek nearly to the mouth of the Spillimacheen River, where it again rises and forms Jubilee Mountain, which has come into considerable prominence as a mining locality. Returning to where the above-mentioned range bends around the head of Quartz and Cañon Creeks, the branches of Grizzly Creek rise some two miles apart, and, bearing northerly and north-westerly, join and flow west into Beaver Creek about one and a-half miles above Bear Creek. A range of mountains is thrust up between these branches of Grizzly Creek, but bends abruptly around the head of the easterly branch and joins the range mentioned previously almost due west of Golden.



To the west is the valley of the north fork of the Spillimacheen River, beyond which lies a high range of hills called "Bald Mountain." It extends some ten miles southerly from Grizzly Creek between the Spillimacheen waters and Beaver Creek. The top of this ridge is covered with grass, excepting a few knobs which rise above the limits of vegetation. Its geological structure seems to differ somewhat from that of the surrounding country, the rocks composing it appearing to consist of granite, also a rock locally known as porphyritic granite, slates and quartz. Nowhere else in the mountains have I observed such extensive exposures of quartz ledges. Some of these are known to carry gold. Their strike is north-west, dipping at a high angle to the south-west. While I cannot give an opinion as an expert, it seems to me that the rock locally known as porphyritic granite is not a granite but a metamorphic rock.

South of Bald Mountain lies a triangular tract of mountains covering an area of about 180 square miles, bounded on the west by Beaver Creek, on the north-east by the north fork of the Spillimacheen and on the south by the middle fork of the same river. Several of the peaks exceed 10,000 feet in altitude, and a few rather extensive glaciers exist, together with many smaller ones. The valleys of two considerable creeks, flowing north-easterly into the north fork of the Spillimacheen, break this mass, which in addition is drained by numerous small creeks discharging into the streams named.

From the south-easterly extremity of this triangle a high wooded ridge extends south-easterly between the north and middle forks of the Spillimacheen nearly to where the former unites with the other branches of this river. The middle fork has its source in the summit or divide range of the Selkirks, in latitude  $50^{\circ} 58'$  north, whence it flows north-easterly, but gradually sweeps around until its course is south-easterly. About 17 miles from its head the stream unites with the south fork, which also comes from the summit range, but considerably to the south of the source of the middle fork. The united waters continue their south-easterly course for a few miles, then turn to the east, and, receiving the discharge of the north fork, flow east into the Columbia River about forty miles above Golden. The tract of country thus roughly described, covering about 800 square miles, is that in which we operated after leaving the Columbia Valley.

From Carbonate Landing we followed the trail to the middle fork of the Spillimacheen, crossing the ridge next the Columbia, the north fork and the high ridge lying between that stream and the middle fork. The latter stream was explored to its source, and a track survey made of it and the surrounding country for a distance of some thirty miles by the trail from Carbonate Landing. This valley is for the greater part of a narrow V shape, with the river rushing through rocky cañons, but occasionally flowing gently through small flats. Snow slides have rushed down on both sides, clearing off much of the timber which has been replaced by a luxuriant growth of grass, affording excellent pasturage for horses.

Our work necessitated the climbing of six high mountains, besides several minor ascents, to commanding positions. One primary and one secondary signal were set while operating in this locality. We had expected to complete our work there in a few days, but three weeks elapsed before we had finished mapping and signal setting. This arose not so much from the natural difficulties of the country as from the almost incessant storms of rain and snow which swept over us. Such disturbances seemed to be local, as, during the whole time, very little bad weather occurred in the Columbia Valley. An immense area of ice lay to the north-west, west and south of us, and I am of the opinion that we owed our discomfort to it. On several occasions we saw the clouds forming from evaporation on these glaciers and ice fields, then they began to drift around among the peaks, occasionally dropping as rain or snow some of the moisture held in suspension.

It was observed that clouds formed in the mountains seldom broke away from them, but discharged their contents within a comparatively short radius of their place of formation. It was noticed by us that the general falls of rain or snow which occurred during the autumn came from moisture laden clouds moving from



the west, probably the Pacific Ocean, and flying high up in the air, brushing the mountain tops. Striking the Selkirks, the lower stratum exhausted its moisture and left detached cloud fragments floating around the peaks and in the valleys. The effect of this seemed to be the generation of strong lower air currents moving in the direction of the storm and driving the cloud fragments into the Rockies and over the summit.

Just before our departure from the middle fork of the Spillimacheen, in the latter part of September, the snow fell in the valley to the depth of rather more than a foot, but vanished during the few following days of fine weather. We retraced our tracks to the top of the ridge overlooking the Columbia Valley, and there turned north-westerly up the valley of the north fork of the Spillimacheen River. Unlike the valleys of other branches of this river this one is quite broad, the benches and slopes rising gradually from the stream for more than a mile in many places before the steeper mountain slopes are reached. As in other parts of the mountains, fire has destroyed much of the valuable timber, although a large amount suitable for ties yet remains. Prospectors had taken pack-horses through several years ago, but now their trail was little more than a blaze on a tree here and there. Our first course was a little south of due west about three and one-sixth miles to Loon Lake, a small sheet of water in the valley, not far from the north fork, and about 1,000 feet lower than the summit from which we started.

From Loon Lake we kept the easterly side for about fifteen and three-quarter miles, where we crossed the stream which was about 20 yards wide. With the exception of about four miles, the chopping necessary to make the trail passable was confined to small trees and brush; but on the four miles mentioned large trees were heaped up so that nothing was left but to cut through them. Then for three and six-tenths miles the trail follows the west bank, when it again crosses the river and passes into a windfall which taxed our chopping ability and the jumping powers of our horses to the utmost. This condition obtains for rather more than three miles until the stream is again crossed near the mouth of a considerable creek coming in from the south-west. Below its mouth for several miles are rather extensive beaver meadows. At one point we found a canal some 200 feet long, dug to a depth of more than  $2\frac{1}{2}$  feet, connecting a pond with the river which here has a slow current and in many places is from 8 to 12 feet deep. From the fresh cutting and tracks in the mud, it was evident that the industrious inhabitants had been gathering their winter's supply of food, and had taken this mode of floating it from the pond into the deeper waters of the river.

Above the mouth of the creek mentioned the west bank of the main stream is followed for rather more than  $10\frac{1}{4}$  miles, about six of this being through green timber; the remainder of the distance traverses open dry timber of which little has yet fallen. Beyond this for about  $3\frac{1}{2}$  miles the valley opens out into grassy flats with occasional clumps of trees.

Then comes a mile and a-half of rapidly rising grassy slopes to the summit between the west branch of Grizzly Creek and the north fork of the Spillimacheen, their sources lying not more than 30 yards apart.

We camped within five miles of the summit, and set a signal 9,400 feet above the sea between the north fork and Cañon Creek. Accompanied by one man I made an exploration on foot to the head of the north fork and down Grizzly Creek some three miles, with the object of learning the topography of the country and finding a short route to the railway. I had been informed that horses were once taken over Bald Mountain down into the Beaver Valley and to Bear Creek Station on the Canadian Pacific Railway; from what was seen, I am inclined to believe that that there would be no great difficulty in doing this. But that was not our objective point. We were trying to find a road to the mouth of Quartz Creek from the head of the north fork. I think that there would be no insurmountable difficulty in descending into Grizzly Creek Valley near the forks, then, following up the west branch for about half a mile, climbing to a rather high divide, and then either descending the east side of Quartz Creek to the government trail from Donald, or keeping along

the tops of the mountains lying between the Beaver and Quartz Creek and descending the nose of the range between the two streams named.

At the time of our visit the snow was knee deep on the summits and part way down the slopes of the mountains and the middle of October was nearly at hand. This rendered the undertaking of such a trip with horses extremely hazardous owing to the liability to be snowed in for the winter at any time. It was therefore decided to retrace our steps to the Columbia Valley. Before doing so, however, I made an exploratory trip across Bald Mountain to the slopes of Beaver Valley. From a coigne of advantage on the mountain a view of solemn grandeur was obtained. I must confess that the feeling of awe and impotence which this spectacle inspired will long remain with me. Facing us and extending to our right was the dark mass of Mount Sir Donald rising 10,625 feet above the sea with 5 miles of almost sheer cliffs 3,000 feet high. To our left, and west of the Beaver, for more than 20 miles peak after peak towered aloft surpassing 10,000 feet, but one and all from top to base were clad in glacier and snow. Not a living thing was visible and the sense of desolation and awful loneliness conveyed was overpowering. Nowhere else in the mountains have I seen such immense masses of glaciers and icefields, and I believe that but little of the area in which these lie has yet been trodden by man. It could be reached by building about 18 miles of road up the Beaver Valley from Bear Creek Station on the Canadian Pacific Railway, and I believe would prove a veritable wonderland.

From our camp on the north fork we reached Carbonate Landing in five days travel, going from that point to Golden in one day. During our whole trip we had but eleven days in which it did not rain or snow, while but eight of these could be considered clear.

It was now the 18th of October and too late to go back into the mountains with the horses which were therefore shipped by rail to the winter range at Morley and the party moved to Beavermouth by the same means. From that point the range of mountains lying between Quartz Creek and the Beaver was ascended and a signal established.

We had intended making the ascent of Mount Bonney, 10,620 feet high, lying in the summit range some 5 miles south of Glacier on the Canadian Pacific Railway; but so much snow had fallen that it would have been both useless and dangerous to make the attempt. The party was therefore sent to Calgary by rail to be paid off.

While we were engaged in the Selkirks the observing party had ascended the north branch of Wapta River to Summit Peak and occupied that station. They then returned to the Van Horne Range near the railway, packed a tent to timber line and prepared to observe. They were exceptionally unfortunate in the weather, the early snow storms having rendered one of the Spillimacheen signals invisible.

The station on the Brisco Range was also occupied, but the weather was too severe to permit successful work. The snow was then knee deep in the valleys, and it was no longer safe to stay in the mountains, so they returned to Ottertail Station on the Canadian Pacific Railway, from which point the horses were shipped to Morley and the party taken to Calgary and paid off.

Although the latter part of the season was greatly against us we accomplished as much as had been expected, with the exception of the ascent of Mount Bonney. This, however, lies on the road to another season's work, and will not occasion much delay.

On the 3rd December, having settled the business of the survey, I left Calgary for Ottawa to prepare returns of the season's operations.

#### NATURAL RESOURCES.

The wealth of that portion of East Kootenay mining district traversed by us consists primarily of timber and mining deposits.



The valuable timber in the Columbia and Beaver Valleys has been reported on before, and needs no comment here, with the exception that a very considerable quantity extends up Beaver Creek some 15 miles beyond any yet located under license.

The actual mineral wealth is at present an unknown factor; but sufficient has been ascertained to make a great development probable within the next few years.

To the present date, with the exception of the "Monarch" mine near Field, no real mining has been done. When this is said it must not be understood that no work is being performed; for such is not the case. The history of nearly every quartz mining area shows that years are spent in the development of such a district; and that process is now going on in the region of which I speak. The difficulties to be overcome are great, and can be realized only by those familiar with mountainous countries.

The present means of communication between the Canadian Pacific Railway and the localities which I shall refer to is partly by water and partly by pack trail. From Golden, situated on the railway, steamboats ply on the Columbia River, passing Carbonate Landing 17 miles above. From this point the Provincial Government has made a pack trail across the country to the middle fork of the Spillimacheen. In the first five miles the trail ascends 2,250 feet; then, descending 1,000 feet in a mile and a half, it climbs to another summit 1,000 feet above the valley.

From that point the branch leading up the middle fork winds along the side of the mountains until the bottom of the valley is reached at nearly the same level as the last mentioned summit. From the trail just mentioned another descends several hundred feet to the mouth of the south fork and follows up that stream.

All the various supplies and plant needed in a mining camp must be taken in on pack-horses at a cost of from two to three cents per pound. I was informed that ore had been freighted out to the river for \$1.50 per hundred. This means a charge of \$30 per ton; so that when other expenses are added it will be seen that rich indeed must have been the ore which would pay for the marketing under such circumstances.

When development has advanced sufficiently no doubt a waggon road will be built, and after that a railroad if the output is such as to warrant it.

When on the mountain tops east of the Columbia a fine view of the country to the west was obtained. It seemed to me that the best route for a waggon road would be to start from the river about 28 miles above Golden, then go westerly and southerly around the end of the ridge between the north and middle forks of the Spillimacheen, and then follow up the latter stream to its junction with the south fork. From that point the mines could be reached along the respective valleys in or adjacent to which they lie.

I was informed that an immense vein of free milling gold quartz existed toward the head of the north fork of the Spillimacheen on which a prospector had staked a claim some years ago. I found that this ledge was known to several others, and afterwards saw what, from the description given, I suppose must have been it. The result of several assays showed that it contained some five or six dollars of gold per ton. This was not sufficiently rich to enable the locator to work it, and caused the abandonment of the claim. The great improvements made recently in methods of working low grade ores would seem to indicate that this ledge might now be mined with profit by a strong company, as it is the quantity taken out which permits the handling of such ores.

The north fork country has not been prospected for quartz to any extent, the few men visiting it having gone there for placer "diggings." Gold can be washed in almost any flat along the streams, but, so far as known, not in paying quantities. The immense number of quartz veins existing has already been mentioned in describing Bald Mountain. Without doubt many are barren, but several were observed to contain sulphurets of iron which in this region generally carry gold. The difficulty of reaching this locality has no doubt largely contributed to its being unexplored, but it can now be entered over the trail chopped out by us, and is, I believe, worthy of the attention of the prospector.



I learned that in the area drained by the Spillimacheen River upwards of 100 mining claims had been staked out and that nearly one quarter of these were being prospected or developed beyond the requirements of the law relating to the holding of claims.

On the middle fork are several properties where considerable money has been expended. One of these, known as the "Bobbie Burns," is a gold mine discovered by Mr. Archie McMurdo, and in process of development by Mr. John E. Askwith of Ottawa. The surface appears to be a free milling ore of high grade: in fact some of the quartz taken by us from the claim showed gold visible to the naked eye. Other specimens, obtained at a depth of about eight feet, are sulphurets, but the quantity of gold contained is not known to me. The many mining men with whom I have conversed were unanimous in saying that this claim was a valuable prospect. A five-stamp mill has been erected at the mine, the machinery for which was freighted from Golden to Carbonate Landing by steamboat, and thence packed on horses' backs to the site of the mill, distant some twenty-eight miles by the trail.

Other claims have been staked adjoining the "Bobbie Burns," while, some three miles further up the stream, another gold-bearing claim named "The Chief of the Selkirks" has been located by Mr. McMurdo. Needless to say, several more claims have since been staked in the same locality.

These gold-bearing properties lie on the northern and western side of the middle fork; but on the other side of the stream, some two miles below the "Bobbie Burns," nine claims known as the "Carbonate Mine" are being developed. I did not visit this mine nor did I see any of the ore, but was informed that a well-known expert had pronounced favourably on the spending of a large sum of money in development. The foreman of the work informed me that they had completed 315 feet of a tunnel which is being run in to intersect the lode.

So far as I learned, operations on other locations in the vicinity seemed to have been confined principally to the assessment labour of \$100 per annum necessary to hold the property. I saw samples of ore being brought out by the proprietors of some of these claims and they certainly appeared to be rich; some was gray copper carrying from 200 to 500 ounces of silver per ton, while more was an argentiferous galena said to contain from 100 to 200 ounces of the precious metal. Small pieces of this latter ore yielded a considerable silver button under the manipulation of the blow-pipe.

On Copper Creek, between the middle and south forks, several claims yielding argentiferous copper and galena ores have been located; but when we were in the vicinity no active work was in progress.

Many claims have been staked along the valley of the south fork, and it is there that the bulk of development work is being done. This locality, however, lies without the railway belt and was not surveyed by us. Four different companies have miners engaged in developing the lodes, at an expense of many thousands of dollars. I understand that the principal ore is a high grade argentiferous galena and that very considerable quantities of it are supposed to exist. Smelters for reducing galena ore to "matte" have been erected at Golden and Revelstoke.

Mining engineers and experts with whom I had the privilege of conversing were united in saying that the surface prospects of the whole Spillimacheen country are extremely good, and that if the promise held forth is realized it will become one of the richest quartz mining areas known. This of course is largely speculative but serves to show the possibilities of the country. A large expenditure of money and steady, persistent work can alone determine what hidden wealth exists in the mountains.

#### AIDS TO DEVELOPMENT.

When it is borne in mind that almost any one of these claims of 20 acres each may yield hundreds of thousands or even millions of dollars worth of gold or silver, it will be seen that the incentive to expenditure is great. It is probable that a fruitful cause of delay in opening up the country is the fact that prospectors holding unde-

veloped claims often demand such an enormous price for them as to prevent capitalists investing. They apparently forget that before most mines yield large profits, sums of money running high up in the thousands must be invested in development work and plant with the chance of discovering that the supposed lode is only a pocket.

On the other hand, I believe that no other class of men endure the hardships undergone by prospectors, and that they are not always treated fairly by capitalists. The manipulation of mines and mining stocks is not altogether unfamiliar to the public, and is a fruitful source of suspicion to the prospector. If any simple and sure method of securing their just dues to both parties could be devised, there seems to be no doubt that it would largely conduce to a more rapid mining development.

In this connection it may not be out of place to speak of the very material aid which would be derived from the possession of good topographical maps. The question of the value of such maps has been so settled that they are being made in nearly every civilized country. The work of making them is being carried on in most of the United States of America, including Nevada, Colorado, Utah, New Mexico, Montana, Idaho and part of Arizona.

The British Colony of New Zealand, possessing about one-eighth of the population of the Dominion of Canada, is prosecuting extensive trigonometrical and topographical surveys.

Eight years ago that portion of the Selkirks with which I have dealt was a totally unknown waste of rugged mountains, deep valleys and dense forest. Then a few adventurous prospectors began to penetrate the fastnesses. Gold in small quantities was found in the streams and served to attract more prospectors. Rich ores were found in various localities, but many of the discoverers kept their topographical knowledge to themselves, hoping to gain advantage thereby. Those who gave information to the public disagreed on many important geographical facts, so that strangers coming in with an intention of prosecuting explorations or investing money were deterred by the natural obstacles to be overcome, and the totally unknown character of the country beyond the ranges bordering the Columbia Valley.

Had the maps mentioned above been in existence they would have served as a sure guide to prospectors, enabling them to plan their operations intelligently, and to show on authorized maps the position of their claims and the best route to reach them by. Even now, when many thousands of dollars are invested in mineral claims, the country away from the pack trails and immediate vicinity of located mining properties is little known.

It is obvious, therefore, that the issue of such maps would save many thousands of dollars in exploratory surveys for roads, and losses to prospectors (on whom the future development largely depends) incident to failure in reaching their objective points through lack of topographical knowledge of the country.

In the Province of British Columbia, where our operations were carried on during the past season, it will be necessary in the near future, preparatory to issuing Crown Patents to interested parties, to ascertain accurately the geographical position of many mining claims now being operated upon.

Apart from the trigonometrical work with which I have had the honour to be charged, the only existing means of doing this is by connecting any claim to be granted with the traverse of the Canadian Pacific Railway made under the authority of the Minister of the Interior, or by precise astronomical determinations. Either of these methods would involve an expenditure of many hundreds or thousands of dollars, and would serve only for claims in the vicinity of the one so located. It would be necessary to make an independent survey up each valley, thus multiplying the cost. In the case of properties near the borders of the railway belt many hundreds of dollars may be saved in each instance where it is possible to connect with one of our triangulation points; since a traverse carried in from the railway would cost from \$50 to \$150 per mile, and a detour of from thirty to seventy miles would very probably be necessary.

To give full value to the primary triangulation, the large triangles of twenty miles side should be cut up into smaller ones with sides of from three to six miles, and monuments left at all these secondary stations, additional marks being established in the valleys wherever practicable. An application of the photo-topographical system, elaborated by yourself, in connection with the secondary triangulation, would permit the construction of a complete topographical map at a fraction of the cost with which such a result has been obtained in any other country. Indeed, it seems probable that any use of ordinary surveying methods in this mountainous region would cause a very great increase in the expenditure with less complete results.

In view of the immense saving which would be effected in the survey of mining claims, it seems plain that the secondary triangulation and topographical work should be at once extended over the mining districts within and contiguous to the railway belt. By so doing there is little doubt that a considerable impetus would be given to private explorations and mining development, and that any expenditure would be amply repaid by the taxable values created by such development.

I have the honour to be, Sir,

Your obedient servant,

W. S. DREWRY,

*Dominion Land Surveyor.*

E. DEVILLE, Esq.,  
Surveyor General,  
Ottawa.





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PART III.

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NORTH-WEST TERRITORIES.

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PART III.

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REPORT CONCERNING THE ADMINISTRATION OF THE NORTH-WEST TERRITORIES FOR THE YEAR 1891.

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GOVERNMENT HOUSE,

REGINA, 25th January, 1892.

The Honourable

The Minister of the Interior,  
Ottawa.

SIR,—I have the honour to submit the following report concerning the administration of the North-West Territories for the year 1891.

It affords me much pleasure to be able to report the continued and increasing prosperity of the country.

The abundant harvest, with which Providence has this year blessed the labour of the husbandman, has been a matter of great congratulation and thankfulness.

Not only has our wheat been harvested in good condition, but its quality is even better than that of previous years which obtained such a world-wide reputation.

As the richness of the soil and the productive capacity of the Territories become each year more widely known, we see a corresponding increase in the number of settlers and in the area brought under cultivation, and a greater degree of comfort and contentment prevailing throughout the length and breadth of this land of promise.

Since the prorogation of the last Assembly, one of the richest districts of the Territories has been opened up by the construction of a line of railway, some 190 miles in length, from the thriving town of Calgary to the beautifully situated town of Edmonton, the great distributing point for the northern unorganized portion of the Territories.

The Canadian Pacific Railway Company are to be congratulated upon the wisdom and foresight exhibited by them in their efforts to connect with the markets of the world those portions of our country which only await the toil and labour of the immigrant to become smiling fields of wheat.

Another, and not an unimportant, line of railway is now under construction between Calgary and the lively town of Macleod. This line, when finished, will traverse, under the brow of the majestic Rockies, the whole of the rich, grass-covered plateaus and valleys of the ranching districts of the south-west. In the south-east, another branch line of railway is about to be constructed by the Canadian Pacific Railway Company, which will attract the attention of the immigrant, and bring a vast and fertile section of the country within reach of a market.

By virtue of an Act passed last session by the Parliament of Canada, it was enacted that the Legislative Assembly of the Territories should, subject to certain provisions, have power to make Ordinances in relation to various subjects, amongst others, the expenditure of the Territorial Funds and such portions of any moneys appropriated by Parliament for the Territories as the Lieutenant Governor is authorized to expend by and with the advice of the Legislative Assembly, or of any Committee thereof.

In pursuance of this Act, an Order of His Excellency the Governor General in Council was passed on the 8th day of December, 1891, giving to the Lieutenant Governor by and with the advice of the Legislative Assembly or of any Committee

thereof, the control of certain portions therein specified of the moneys appropriated by Parliament for the uses of the Territories for the fiscal year 1891-92.

For the more satisfactory discharge of the new duties thus imposed upon the Assembly, it was deemed advisable that an Executive Committee, consisting of four members of the Assembly, should be appointed to aid and advise in the government of the Territories, so far as the same is vested in the Lieutenant Governor and the Legislative Assembly.

An Ordinance was accordingly passed, to which I assented on the 24th December, 1891, providing for the appointment of such Executive Committee.

That Committee was subsequently selected and consists of Messrs. F. W. G. Haultain, member for Macleod; James Clinkskill, member for Battleford; J. R. Neff, member for Moosomin; and Thomas Tweed, member for Medicine Hat.

I trust that the mode thus provided for the carrying out of the intention of Parliament regarding the expenditure of these funds will in all respects prove satisfactory.

In response to repeated memorials from the Territorial Legislature, the Parliament of Canada last session clothed the Legislative Assembly with power to legislate with respect to intoxicating liquors, an exception being made in regard to the portions of the Territories not represented in the Legislature.

An Ordinance was accordingly passed by the Legislature in the session just closed providing for the sale of intoxicating liquors and the issue of licenses therefor, which will come into operation on 1st May, 1892.

By this Ordinance the liquor clauses of the North-West Territories Act have been repealed, and the permit system so long in vogue been abolished.

It is the earnest hope of all who have had part in dealing with this grave question that the action thus taken by the Legislature will tend to promote and secure the high reputation for order and morality now possessed by the people of the Territories.

It is gratifying to be able to report continued progress in educational affairs in the Territories.

During the quarter ended 30th September last there were 222 schools in operation, with 267 teachers and 5,352 pupils, an increase of 15 schools, 32 teachers and 1,079 pupils, as compared with the corresponding quarter in 1890.

Applications are now pending for the formation of over twenty new school districts. This alone will tend to corroborate the reports of an increasing immigration into the country.

#### SESSION OF ASSEMBLY.

The first session of the Second Legislative Assembly opened on the 10th day of December, 1891, and closed on the 25th day of January, 1892.

#### LEGISLATION.

The following Ordinances were passed during the above session, viz. :—

1. An Ordinance respecting the Executive Government of the Territories.
2. An Ordinance respecting Revenue and Expenditure.
3. An Ordinance to amend "The Interpretation Ordinance."
4. An Ordinance to amend Ordinance No. 27 of 1889, intituled "An Ordinance to incorporate the Medicine Hat General Hospital."
5. An Ordinance to repeal Ordinance No. 2 of 1889.
6. An Ordinance prescribing the Oath of Members of the Executive Committee.
7. An Ordinance to incorporate the Town of Edmonton.
8. An Ordinance to legalize By-law No. 144 of the Corporation of the Town of Prince Albert.



9. An Ordinance to amend Ordinances No. 5 of 1888 and No. 14 of 1890, respecting the profession of medicine and surgery.

10. An Ordinance respecting Deputy Clerks and Deputy Sheriffs.

11. An Ordinance to amend Ordinance No. 11 of 1890, being an Ordinance to amend "The Game Ordinance."

12. An Ordinance to amend Ordinance No. 19 of 1890, entitled "An Ordinance to amend the Revised Ordinance respecting the legal profession."

13. An Ordinance to amend Chapter 20 of the Revised Ordinances, 1888, intituled "An Ordinance respecting prairie and forest fires."

14. An Ordinance to repeal Chapter 42 of the Revised Ordinances, 1888, intituled "An Ordinance respecting fees in summary trials."

15. An Ordinance to authorize the formation of an association under the name of the Dairymen's Association of the North-West Territories.

16. An Ordinance to amend and consolidate as amended the Ordinance respecting Fire Districts.

17. An Ordinance to further amend chapter 30 of the Revised Ordinances, 1888, intituled "The Companies Ordinance."

18. An Ordinance respecting the sale of intoxicating liquors and the issue of licenses therefor.

19. An Ordinance respecting benevolent, provident and other societies.

20. An Ordinance to amend chapter 58 of the Revised Ordinances, 1888, entitled "The Judicature Ordinance," and Ordinance No. 21 of 1890, entitled "An Ordinance to further amend 'The Judicature Ordinance.'"

21. An Ordinance for protecting the public interests in rivers, streams and creeks.

22. An Ordinance respecting chemists and druggists.

23. An Ordinance to amend chapter 19 of the Revised Ordinances, intituled "An Ordinance respecting Brands."

24. An Ordinance to amend and consolidate as amended the Ordinance respecting the herding of animals.

25. An Ordinance to amend chapter 8 of the Revised Ordinances, 1888, intituled "The Municipal Ordinance."

26. An Ordinance to amend and consolidate as amended the Ordinances respecting fences.

27. An Ordinance respecting the protection of property.

28. An Ordinance to further amend chapter 59 of the Revised Ordinances, 1888, intituled "The School Ordinance."

29. An Ordinance relating to Arbitration.

30. An Ordinance to give Joseph Henry Wrigley a certain status as a student-at-law.

31. An Ordinance to declare the incorporation of the Saltecoats Dairy Association valid.

32. An Ordinance to legalize the purchase by the Corporation of the Municipality of the Town of Calgary, of the lands hereinafter particularly described, and for other purposes.

33. An Ordinance to incorporate the Synod of the Diocese of Calgary, and the parishes of the said diocese.

34. An Ordinance to incorporate the Ranchmen's Club of Calgary.

35. An Ordinance to give Edward Arthur Craven McLorg a certain status as a student-at-law.

36. An Ordinance to enable William Laurie to be enrolled as an advocate of the Territories.

37. An Ordinance to incorporate the Assiniboia Club.

38. An Ordinance for granting to the Lieutenant-Governor certain sums of money to defray the public expenses of the Territories for the half year ending 30th June, one thousand eight hundred and ninety-two, and for other purposes relating thereto.



## APPOINTMENTS.

The following is a list of the Territorial appointments made since my last report:—

*Justices of the Peace.*

Name.	Address.
Terance H. G. O'Brien .....	Victoria, Alberta.
Nels. H. Neilson.....	Yorktown, Assiniboia.
William P. Hopkins .....	do do
Percy R. Neale.....	Lethbridge, Alberta.
George W. Gairdner .....	St. Albert, do
George M. Hunt.....	Langenburg, Assiniboia.
John C. Slater.....	Prince Albert, Saskatchewan.
James Balfour.....	Hill Farm, Assiniboia.
John Starling .....	do do
John T. Stenshorn.....	Regina do
Andrew R. Dickson.....	Dunmore do
Finlay Kennedy .....	Montgomery do
William McCaw .....	Sunnymeade do
William Sanders .....	Swift Current do
James H. Young.....	Moosomin do
John King.....	Whitewood do
Peter M. Gillis .....	do do
Richard H. Williams .....	Regina do
Alexander McArthur.....	Welwyn do
Henry W. Aylesworth .....	Pense do
John Burke .....	Fairmede do
Ronald Stewart .....	Welwyn do
Thomas Moore .....	Dongola do
John McCarthy.....	Balgonie do
William Rowland.....	Riversdale do
George Balfour.....	Grenfell do
James Baxter .....	Loon Creek do
James B. Hawkes.....	Balgonie do
James W. Reynolds.....	Reynoldton do
George A. E. Hyde .....	Grenfell do
Leslie H. Hoskins .....	Craven do
Peter Prudent.....	Lac-la-Biche, Alberta.
Inspector Snyder .....	North-West Mounted Police.
Edward Bolton .....	Salteoats, Assiniboia.
William H. Rooke .....	do do
Arthur Dingwall.....	do do
David Robb.....	Moose Jaw do
John Duncan.....	Cash City, Alberta.
Robert P. Wood .....	Red Deer do
Joseph Callin .....	Whitewood, Assiniboia.
Inspector Starnes.....	North-West Mounted Police.
William Braithwaite .....	Indian Head, Assiniboia.
Ernest C. Clarke.....	Fort Pelly do
Benjamin Burke .....	Elmore do
Robert Porter.....	Moose Jaw do
Henry L. Toms.....	do do
John J. Porter.....	do do
Hugh Noble .....	Fort Qu'Appelle do
John R. S. North .....	Edgely Farm do
Thomas W. Harris.....	Battleford, Saskatchewan.

Name.	Address.
Thomas E. Donelly.....	Indian Head, Assiniboia.
John H. Fraser .....	Edgely Farm do
Walter B. Sheppard.....	Qu'Appelle Station do
Ronald C. McDonald .....	Battleford, Saskatchewan.
Hubert A. Donovan ....	Lee's Creek, Alberta.
George F. Guernsey.....	Fort Qu'Appelle, Assiniboia.
Joseph Lake .....	Anthracite, Alberta.
Samuel Jackson .....	Kinistino, Saskatchewan.
Patrice Fourmond .....	Fish Creek do
Hugh Rogers ....	St. Louis de Langevin, Saskatchewan.
Herbert Martin.....	Lethbridge, Alberta.

*Notaries Public.*

Peter M. Morrison .....	Calgary, Alberta.
Alexander G. Thorburn .....	Broadview, Assiniboia.
Thomas S. Barwis.....	Calgary, Alberta.
Rudolph H. Wyssman.....	Moosomin, Assiniboia.
James Sumner.....	Sumner do
Leonard C. Fulmer.....	Banff, Alberta
James Muir, Q. C.....	Calgary do
Adolphe A. Ringuette .....	St. Albert do
Richard Peake.....	Calgary do
Patrick L. McNamara.....	do do
Joseph V. Kildahl.....	Edmonton do
Patrick L. Nolan.....	Calgary do
Thomas W. Clark.....	Lethbridge do
Hedley C. Taylor.....	Edmonton do
Sidney C. Fisher.....	Saltcoats, Assiniboia
Norman McKenzie.....	Regina do

*Commissioners to take outside the Territories affidavits for use therein.*

Hilton Percy Barrand.....	London, England.
Robert William Regge.....	do do
Frederic Hague.....	Montreal, P. Que.
Alexander James Murray .....	London, England.
John Proffitt.....	do do
Alfred Heales .....	do do
Edwin H. Bissett.....	Montreal, P. Que.

*Coroners.*

Richard J. Molloy.....	Clark's Crossing, Saskatchewan.
Dr. Herbert C. Wilson.....	Edmonton, Alberta.
Dr. Joseph Potvin.....	do do
Percy R. Neale.....	Lethbridge do
Dr. Harry G. MacKid.....	Calgary do
Richard C. Kisbey.....	Dennington, Assiniboia.

*Issuers of Marriage Licenses.*

John James Heaslip.....	Alameda, Assiniboia.
Alexander D. Dickson.....	Qu'Appelle Station do
Arthur B. Lander.....	Saltcoats do
William Smith.....	Qu'Appelle Station do
Rev. Leonard Dawson.....	Regina do
W. P. Hopkins.....	Yorkton do
Finlay Kennedy.....	Montgomery do
William Rowland .....	Riversdale do

*Fire Guardians.*

Name.	Address.	
Staff Sergeant Keenan.....	North-West Mounted Police.	
Corporal Doyle.....	do	do
do Kelly.....	do	do
Constable Anderson.....	do	do
do Brown.....	do	do
do Kembry.....	do	do
do McKenzie.....	do	do
Sergeant Bierd.....	do	do
Staff Sergeant McGinnis.....	do	do
Corporal Parrot.....	do	do
do Williams.....	do	do
Constable Williams.....	do	do
do Holmes.....	do	do
do Bates.....	do	do
do Burrett.....	do	do
do Alexander.....	do	do
do Boake.....	do	do
do Fanning.....	do	do
do Noice.....	do	do
do Mackie.....	do	do
do Raven.....	do	do
do Nelson.....	do	do
do Simmonds.....	do	do
do Wright.....	do	do
do Stodart.....	do	do
Inspector Morris.....	do	do
do Baker.....	do	do
Sergt.-Major Spicer.....	do	do
Staff-Sergt. Davis.....	do	do
do Hilliard.....	do	do
do Evans.....	do	do
Sergeant Murison.....	do	do
do Roby.....	do	do
do Cotter.....	do	do
do Turnbull.....	do	do
do Watson.....	do	do
do Brown.....	do	do
do Wilde.....	do	do
Corporal Brown.....	do	do
do Browne.....	do	do
do Bullock.....	do	do
do Featherstone.....	do	do
do Whitehead.....	do	do
do Kirkman.....	do	do
do Provost.....	do	do
Constable Dowling.....	do	do
do Alexander.....	do	do
do Mathiew.....	do	do
do Richardson.....	do	do
do Harvey.....	do	do
do Jarvis.....	do	do
do Forde.....	do	do
do Quick.....	do	do
do Holmer.....	do	do



Name.	Address.
Constable Percival .....	North-West Mounted Police
do Currie .....	do do
do Hinchcliffe .....	do do
do Conway .....	do do
do Jamieson .....	do do
do McGarth .....	do do
do Blair .....	do do
do Eden .....	do do
do Jackson .....	do do

*Veterinary Surgeon.*

Staff Sergeant Wm. Mitchell .....

North-West Mounted Police.

*Advocates Enrolled.*

Harry Symons .....

Toronto, Ontario.

Hugh St. Quentin Cayley .....

Calgary, Alberta.

Rudolph Henry Wyssman .....

Moosomin, Assiniboia.

Lawrence J. Clarke .....

Prince Albert, Saskatchewan.

Patrick L. McNamara .....

Calgary, Alberta.

Thomas William Clarke .....

Lethbridge, Alberta.

Bertram Tennyson .....

Moosomin, Assiniboia.

John Alexander McCaul .....

Macleod, Alberta.

Norman MacKenzie .....

Regina, Assiniboia.

Hedley Clarence Taylor .....

Edmonton, Alberta.

*Dentists Registered.*

William Charles Kaake .....

Portage la Prairie, Manitoba.

James Johnson White .....

Winnipeg do

Robert Hutchison Robertson .....

Portage la Prairie do

Alexander Hooper Goodwin .....

Edmonton, Alberta.

*Letters Patent of Incorporation.*

The Regina Electric Light and Power Company.

The Calgary Woollen Manufacturing Company.

The Alberta Hotel Company (Limited).

The Alberta Petroleum Land Development Company (Limited).

The Moose Jaw Electric Light and Power Company.

The High River Trading Company.

The Western Milling Company (Limited).

The Regina District Elevator Company (Limited).

The Edmonton Electric Lighting and Power Company.

The Moosomin Elevator Company (Limited).

Boorne and May.

*Companies Registered under "The Companies' Ordinance."*

The Canadian Alliance Farming Company (Limited).

The Canadian Homestead Settlement Company (Limited).

The Canadian Agricultural Coal and Colonization Company (Limited).

Calgary and Medicine Hat Land Company (Limited).

The Dominion Building and Loan Association.

Canadian Mutual Loan and Investment Company.

The North-West Trading Company of Canada (Limited).

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*Companies Incorporated under the Ordinance providing for the Incorporation of  
Butter and Cheese Manufacturing Associations.*

The East Moose Mountain Dairying Association.

*To administer Oaths and Declarations under Ordinance No. 14 of 1889.*

John Henry Knowler.....Whitewood, Assiniboia.

I append hereto a return, as required by Section 93 of "The North-West Territories Act," of all liquor permits issued by me during the year 1891.

I have the honour to be, Sir,

Your obedient servant,

J. ROYAL,

*Lieutenant Governor of the North-West Territories.*





RETURN of Special Permissions for the Importation of Intoxicating Liquors into the North-West Territories, &c.—Continued.

PERMITS.	QUANTITY IN GALLONS OF EACH INTOXICANT IN EACH PERMIT.							TOTAL QUANTITIES.							REMARKS.		
	Whiskey.	Brandy.	Wine.	(Vin.	Rum.	Alcohol.	Beer.	Porter.	Whiskey.	Brandy.	Wine.	(Vin.	Rum.	Alcohol.		Beer.	Porter.
1	5	5	4	3					5	5	4	3					
2	4								8	4							
1	10	6	1			5			10	5				5			
1	6	1	1						6	1	1						
2	3	5	1	1					6	10	2	2					
1	3	5	10			5			9	5	10			5			
1	5	5	2	2					5	5	2	2					
1	3	3	2	2					6	4	4	2					
1	2	5	3	3					2	5	3						
1	2	2	6						7	6	6						
10	2	2	2						20	20	20						
5	5	5	2	3					25	25	10	15					
1	2	2	2						2	2	2				32		
8	2	2	1						16	16	8						
5	3	1	2						40	2	10						
2	4	1	2						8	2							
1	5	4	1		1				5	1	1		1				
5	4	4	1						20	20	5						
4	5	5	2						20	4	8						
3	5	5	5			5			15	15	5			15			
1	1	1	5						1	2	5						
18		1								18							
230		2								460							
10		4								40							
50		5								250							
6		1	1						6	6	6						
4		2	2	2						8		8					
2		3	2							6	4						
10		2	3							20	20						
5		2	3			5				10	15						
3		3	3							15				15			
1		3	1							3	1						
1		2	2							5	1						
1		1	1							2	2	2					
1		1	2	2						1							
1		1								2							
1		1			1					1							
1		1			1					2							
1		1			1					2							
1		1			1					1							

[illegible]

Sacramental.

14 RETURN of Special Permissions for the Importation of Intoxicating Liquors into the North-West Territories, &c.—*Concluded.*

RECAPITULATION.

Spirits—		Galls.
Whiskey .....		12,251
Brandy .....		1,203
Gin .....		457
Rum .....		102
Alcohol .....		328
Total .....		14,341
Wine .....		1,025
Beer .....		18,652
Porter .....		281
Beer for sale—limit 4 per cent alcohol .....		86,926½
Grand total .....		121,825½

Liquors sold on dining cars of Canadian Pacific Railway, under permit for wine and beer, dated 30th July, 1886, from the 25th January to 25th December, 1891.  
Wine, 76 galls.; beer, 673 galls.



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PART IV.

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REPORT OF THE LIEUTENANT-GOVERNOR OF KEEWATIN.

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## PART IV.

## REPORT OF THE LIEUTENANT GOVERNOR OF KEEWATIN.

GOVERNMENT HOUSE, WINNIPEG, 31st December, 1891.

The Honourable

The Minister of the Interior,  
Ottawa.

SIR,—In writing my final report for the year 1891, I find that I can shorten it by making, for after reference, the following quotations from my concluding report of 1890, published as Part VI of the annual report of the Department of the Interior for that year:

“The exhaustive nature of the several reports I have made during the past summer and autumn on matters connected with the government of the District of Keewatin renders it unnecessary for me, in this concluding report of 1890, to do more than give you a brief summary of the present condition of the district.

“After my inauguration in 1888 I intimated to you the difficulty there would be, in view of the vastness of the area, over three-quarters of a million square miles, with a sea-coast line of over 3,500 miles, part of which only was accessible, and a (Winnipeg) lake coast line of about 250 miles, of maintaining law and order without a judiciary, council, available force, or postal and telegraphic communication; and these difficulties were rendered greater by the fact that only an annual vote of \$5,000 could be counted upon, of which three-quarters were necessary for the clothing and maintenance of insane persons said to be from the district.

“Under these circumstances it was obvious that efficient government could only be initiated and maintained by the good-will and active co-operation of all who possessed influence with the Indian population of the district; and that while it became the duty of the Lieutenant Governor to become intimately acquainted by personal inspection or otherwise, with the actual condition obtaining in various parts of the district, yet he must depend largely upon the good offices of those resident within it.

“I am pleased to be able to state that I have received uniform support and valuable information from those devoted men who occupy the mission fields in the district, and from the heads of their church organizations here; from officers of the Hudson Bay Company in the district, and from their respected head here.

“The selection for recommendation as justices of the peace became, with the aid referred to, an easy matter; and regarding the members of this unpaid magistracy, I desire to report my entire satisfaction with the manner in which they have striven to create and maintain a feeling of loyalty toward our Sovereign and respect for her laws. I had every reason to hope that, thus supported, the administration of the affairs of the district might be inexpensive and effective so far as any internal difficulty was concerned, yet, having witnessed for the past thirty years the degrading and dangerous effect of intoxicants upon our Indian population (changing the peaceable convert, in an hour, into as dangerous a madman as any of his Saki-drinking Mongolian ancestors), I felt, and in the autumn of 1888 advised you, that if law and order were to be maintained in the district, there must be the most stringent enforcement of those clauses of the Keewatin Act which prohibit the introduction of intoxicants. Unfortunately for the ease with which this might be done, the route by which this unlawful introduction had been and was likely to be effected was a water one; and the principal expense which has been incurred has



been for the boats, skiffs, canoes, appliances, &c., to maintain a water patrol on the lake and rivers.

"Aided as I have thus been, it is with great pleasure that I am able to report the entire absence of serious crime in the district for the past two years and a-half.

"The means adopted to prevent the introduction of intoxicants have been entirely successful. The number of permits issued since the opening of navigation has been thirty, each one being for two gallons of spirits for the year, or its equivalent in wine or beer.

"There has been an entire absence of contagious diseases, vaccination being general under the Indian branch of your Department.

"I have also to report a continued decrease of fur-bearing animals near the southern shores of Hudson Bay, with more of suffering among the Swampy Cree of that district, as well as a decrease of walrus, seal and whale off the east and north-east sea-coast of the district, caused, it is said, by the increasing and unceasing efforts of whalers in Fox and other northern channels."

I am pleased to be able to state, with reference to the year 1891, that up to latest advices from the interior of the district there has been a similar absence of serious crime; that the administration of justice has been, on the whole, satisfactory; and that there have been, so far as reported to me, no infractions of those portions of the Keewatin Act which relate to intoxicants.

I have to report a continued willingness generally on the part of those mentioned in the above quoted report to assist me by their local and general knowledge in the work of government; and to such disinterested and unpaid aid my acknowledgments are due and are freely given.

There has been, on the whole, a gratifying absence of contagious disease throughout the district. "La grippe," however, after the Manitoba epidemic of last year, and after the date of my last annual report, extended northwards and caused about the same ratio of mortality as in this Province.

While the fur-bearing animals generally have not increased, there seems to have been some increase of the food animals of the district; the fresh-water fisheries have been on the whole good, and as a consequence of this altered condition, there has been, up to last inland reports to me, no suffering except on the sea coast parts of the district, where the danger of this condition must always be present till time and protection have restored the sea animals and fish mentioned in my (1890) reports and those of the present year. With reference to what I stated in my final report for 1890, I have since received from Churchill and other quarters fuller information, and hence advised you that, while American whalers have ceased to visit that part of Keewatin sea coast south of the mouth of Chesterfield Inlet, it is simply because they have exhausted that area, and confined their efforts to the still more northern Canadian waters of Fox and other channels, Rowe's Welcome and Lyon Inlet, leaving the more southern water referred to, in which they had carried on their operations without the slightest reference to the distance from shore; while, to enable them to avoid late navigation of Hudson Straits they frequently wintered, as I advised you, in one of the harbours of Marble Island, where they traded to the Esquimaux with goods upon which no duty was paid, thus violating the revenue laws of Canada, and injuring the trade of a Canadian-English company who traded with goods upon which duties had been paid.

The winter of 1890-91 seems to have been severe in the northern portion of the district, both of the annual sailing ships of the Hudson Bay Company being compelled to winter in James Bay, the Churchill and York ship leaving the latter place on 11th October, 1890, and having to return from the Straits to where she wintered. This northern cold caused also, fortunately, a more than usually southern range for the caribou, northern red deer and moose, the latter having reappeared as far south as the southern end of Lake Winnipeg, and in Keewatin increasing materially the food supply of the Indians who fail so frequently to store for the winter the bountiful supply of fresh-water fish so easily procurable.

As regards the future food supply of the non-treaty Indians of the district, should you desire to advise the withdrawal of such from the denuded coast districts to where they may supplement their wild animal and fish food by cultivated grains and roots, I commend for special consideration the communications forwarded you from time to time regarding roots and grains in the Oxford House and Norway House districts, and the more eastern and southern portions of Keewatin, where the yield and class of vegetables have been most satisfactory, and the tests caused to be made by me for the Agriculture Department, of Ladoga wheat and of foreign varieties of oats and barley, have been, by the Experimental Farm branch of that Department, pronounced satisfactory, the latest report to me, received by me and forwarded to you this day, stating as the result of the trial of Ladoga wheat and Prize Cluster oats in the south-eastern part of the district, as follows, addressed to the Deputy Head of the Department of Agriculture, by Professor Saunders:—

“Your letter of 22nd December, accompanied by one from Lieut.-Governor Schultz, is received; also the samples to which Governor Schultz refers. I find the Prize Cluster is a very fine sample of oats, weighing  $45\frac{1}{4}$  lbs. per bushel, or  $11\frac{1}{4}$  lbs. over the standard. This is a very extraordinary weight for an oat to attain in that climate, and indicates that it is likely to be a good district for growing oats. The sample of wheat is not large enough to enable us to determine its weight per bushel, but it looks as though it would go about the standard weight.”

While I have much pleasure in being able to report so favourably to you regarding the general conditions up to my latest advices from the district, and the successful efforts of its devoted missionaries, yet I have intimated to you the necessity I see for a conference with you regarding measures for the continuance of many of the conditions which obtain in the district, which are now being seriously threatened from various causes; and hence I greatly regretted that illness since early in the commencement of the present month prevented my having that conference here during your recent visit to the West; and I shall, therefore, D.V., if the meeting of the Manitoba Legislature does not interfere, go to Ottawa to discuss these matters with you as early after the 15th prox. as I can leave here.

I have the honour to be, Sir,

Your obedient servant,

JOHN SCHULTZ,

*Lieutenant-Governor.*





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PART V.

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ROCKY MOUNTAINS PARK.

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PART V.

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REPORT OF SUPERINTENDENT OF ROCKY MOUNTAINS PARK.

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ROCKY MOUNTAINS PARK,  
BANFF, 31st December, 1891.

Hon. EDGAR DEWDNEY,  
Minister of the Interior, Ottawa.

SIR,—I have the honour to submit for your information the following report of the transactions at the Park for the past season.

ROADS.

At the close of my report last year the work on Buffalo Avenue was in progress, and was continued through the months of November, December and January.

This work, consisting of rock excavation, was carried on with advantage in the frosty weather of these months, and there being little or no snow on the ground it afforded the opportunity of getting this class of work off our hands before the opening of the spring. The work was then suspended during the months of February and March, with the exception of the labour of one or two men who were occasionally employed in clearing the ice and snow from the roads caused by the usual overflow of the Spray River.

The regular work was resumed in April, and a small force was engaged in completing the rock work on Buffalo Avenue, and continuing the road round Tunnel Mountain and on to the table land in the rear thereof, and then on to the "Hoodoos," a distance of three miles.

As this was all the work contemplated to be done in that direction, the men were removed to Sundance Avenue—a continuation of Cave Avenue westward.

This road is of the greatest importance, not only as giving access to the Cañon, a point of great interest, but chiefly as a fire break. Nearly all the fires which occur in the Park originate towards the west, and spread towards the east.

At a point immediately west of the Cave and Basin these fires can (if at all possible) be arrested, but the quantity of dead fallen timber not only affords fuel for the fire but prevents any working party from reaching it with the appliances for extinguishing.

The object therefore of this road is not only to provide a fire break, but also to afford the means of access to the fire at the most favourable spot for arresting its progress eastward.

In June last Dr. R. G. Brett, M.L.A., addressed a letter to you setting forth the necessity for some improvement on the road between Banff and Canmore, and requesting that some money be expended on the portion of this road within the Park.

This letter was referred to me for a report upon the advisability of granting Dr. Brett's request.

I reported "that the present road from Banff to Anthracite had been constructed by the Anthracite Coal Company and is located for a portion of the distance along the line of the Canadian Pacific Railway. It is in a very dangerous position and serious accidents may occur at any time. It cannot therefore be recommended for the expenditure of public money.



"From Anthracite to Canmore the road is in a better position but still very rough and not at all suitable for public traffic. About six miles of this road is within the Park limits.

"If the Minister should conclude to lay out any portion of the Park appropriation on this road, I would strongly recommend that it be done quite independently of money from any other source, or under the control of any other parties. The plan I would suggest is this :—

"I am now constructing the road round Tunnel Mountain, which will be continued down to the 'Hoodoos,' and eventually be continued beyond the 'Hoodoos' on the high table land, pass down into the Bow valley, cross the river and link into the present 'loop road.'

"From this road where it passes the Hoodoos a branch to Anthracite could be made which would be only a mile long and over a very favourable route; and then a short branch, half a mile long, connecting with Banff Avenue would make the road from Banff to Anthracite complete, on the shortest possible line and at the least expenditure, over a beautiful section of natural scenery, besides being quite clear of the railway and without bridges or other source of danger and expense.

"This work would be well within the limits of the Park and allow of any expenditure by the North-West Government to be placed on the road between Anthracite and Canmore."

Your approval of these suggestions was received by me early in September at which time my men were engaged on the Sundance Avenue, and as soon as it could be done to advantage they were transferred to Anthracite, and the branch from there to Hoodoo Avenue was completed in the month of October, and the branch connecting with Banff Avenue was made passable but not completed in November.

The Sundance Avenue was finished to the mouth of the Sundance Creek and will be completed in the spring. The remainder of this road as far as the Cañon can be constructed cheaply. The expensive portion is completed, and when the remainder of the dead and fallen timber is removed it will reduce the danger from fire in the Park in a very great measure.

A side-walk 2,400 feet long and 6 feet wide was under way from the Canadian Pacific Railway station to connect with the side-walks of the village. This was necessary for pedestrians going to and from the station, as without it they had to take the carriage road which was often either dusty or muddy.

This side-walk was graded to a level surface and then covered with slag or cinders which the railway company supplied from their shops at Canmore. It makes a safe, durable and cheap walk, and free from any of the dangers of the ordinary plank-walk.

During the construction of the roads in the Park, from year to year, a quantity of stones had been taken off and piled on the margins. These piles of stones had at last become very unsightly and had to be removed. I therefore decided to utilise them for a purpose that would not only cost the least possible for their removal, but add another feature to the beauties of the Park.

Immediately below the Bow Falls a small ornamental lake had been formed in the early construction of the road leading to the Spray bridge, the intention being to supply this lakelet by the water of the stream running down Glen Avenue and discharging into the river below the falls. The whole scheme had not been completed, and the space between the road and the bottom of the falls was very unsightly at low water from the exposed sand beds and the accumulation of rubbish coming down the river and lodging in this bay. This has all been remedied by the construction of a wall, formed by the surplus stone from the roads, separating the river from these small ornamental lakes, and at no additional expense, as the stone had to be removed and no place could be found to deposit them nearer than this point. The water will now be kept at a uniform level in the lakes, instead of drying up during the time of low water in the river.

During your visit here in the summer of 1890 you expressed a desire that a foot bridge should be constructed across the Bow River below the falls, for the

benefit of pedestrians. It was thought that a floating bridge would answer the purpose.

I was aware that difficulties might occur in the construction of a bridge of that description from the action of the ice in winter and spring; I therefore made careful observations of the motion of the ice last winter, and from these observations, and the experience of previous winters, I have concluded that a floating bridge in that locality would prove a failure.

Several times during each winter immense ice shoves take place on the Spray and Bow Rivers, and no bridge on the floating principle could withstand the shock.

A foot bridge on the suspension or truss principle may be called for in the future, but at present the cost of such a structure would hardly warrant it.

#### TIMBER.

A quantity of refuse timber has been cleared up along the sides of the roads as usual, and each year this process is continued.

A permit to make ties at Lake Minniwanka last winter was granted to Mr. James Ross. A large quantity of ties were taken out and a considerable revenue was derived therefrom.

A quantity of the smaller timber has also been disposed of, required for fencing on the prairies and mining purposes. By these means the dead timber is gradually disappearing and its complete removal will add much to the beauties of the Park.

#### FIRES.

The Park has been tolerably free from fires during the past season, only one, in the latter part of May, occurring of any consequence. This fire originated on the railway track, to the west of the Park, but spread eastward to the Vermilion Lakes, destroying a large quantity of the beautiful natural shrubbery in that direction.

All the men in the Government employ were turned out, and the fire was, after much exertion, stopped and finally subdued at a point about half a mile west of the Cave. It was this and previous fires that induced me to urge on the construction of the Sundance Avenue, to form a fire break at the narrow pass between the Bow River and the base rocky shoulder of Sulphur Mountain.

This road was made late in the autumn, and when the rubbish along it is finally cleared up during this winter and spring a complete fire break will be formed at that point.

I have had some correspondence with the officials of the Canadian Pacific Railway Company regarding fire originating on their track and have every assurance from them that their instructions to their employés are very strict with respect to the management of their engines. I am sure that the railway company feel the great responsibility that attaches to them in this matter. Had a high westerly wind prevailed during the time of the fire in May last, the consequences, I fear, would have been most disastrous to every building in this neighbourhood, including their magnificent hotel.

The company I know are fully alive to the risks and dangers from fires on their railway, and I hope to be able to assist them in the spring in removing the rubbish from the vicinity of the track.

#### MUSEUM.

In accordance with your wishes the Museum building has been fitted up for the reception of such Geological, Botanical and other Natural History specimens, as may be intended to place there. This has been confined to the upper story of the building only. The lower story can be completed for any purpose for which in the future it may be required in connection with the Museum.

Professor Macoun spent some months here last summer collecting botanical and other specimens of the natural history of the Park, and from his well established reputation as a naturalist, a great additional attraction to the Park will be gained when his extensive collection is placed in the Museum.



The Professor, as might be expected, made a most exhaustive exploration of the Park, and I am sure that his report and catalogue will be of the greatest value and interest to many future visitors.

#### HAY CROPS.

The uniform height of the rivers and favourable weather have together produced an excellent hay crop on the meadows of the Park, and completely upset the theories of persons who predicted the exhaustion of the crop by repeated cutting from year to year.

#### METEOROLOGICAL.

I append the report of Mr. McLeod on the observations taken by him during the past year.

It will be seen that these observations contain only the temperature and state of the weather. The necessity for more extended information of the climate here is very evident.

It is well established by the limited observations that have been taken that the low humidity of the atmosphere here is a condition highly beneficial to invalids or delicate constitutions, and if this fact were more generally known it would add much to the reputation of the place as a health resort.

#### VISITORS.

It is highly satisfactory to observe the increase in the number of visitors from year to year, and particularly during the past year. It is noticed that many of these repeat their visits annually and bring many others with them to enjoy what they style as the finest scenery and most healthful atmosphere they have ever experienced.

The extension of the roads throughout the Park, affording access to many points of interest by drives and bridle paths, has added much to the reputation of the place, and detains the visitor much longer to enjoy it than formerly. A few more bridle roads leading out into the several game and fishing grounds beyond the limits of the Park will afford additional inducements to the sportsman to spend his leisure time here.

The number of guests at the Canadian Pacific Railway hotel shows an increase of 822, and at the Sanitarium the increase is 1,170 over the previous year.

The smaller hotels at the Hot Springs show the number of guests there at 915, or a total of visitors to the Park of 7,250.

The total registered at the Cave and Basin this year was 5,066, or an increase of 1,385 over the year before.

I have the honour to be, Sir,

Your obedient servant,

GEO. A. STEWART,

*Superintendent.*



ROCKY MOUNTAINS PARK—Readings of the Thermometer and general state of the Weather as taken at Banff, N.-W.T., between 1st November, 1890, and 31st October, 1891.

Date.	Temperature.			Weather.
	7 a.m.	2 p.m.	9 p.m.	
1890.				
Nov. 1	33.2	54.0	39.0	Fair.
do 2	30.0	53.0	39.8	do
do 3	31.0	53.0	36.0	do
do 4	26.8	50.2	34.2	Cloudy.
do 5	20.2	44.5	31.0	do light snow fall.
do 6	9.8	25.0	11.5	Fair.
do 7	11.3	29.8	26.0	do
do 8	28.0	35.0	32.5	do
do 9	22.8	36.2	36.0	do
do 10	32.2	35.8	32.5	Cloudy; light snow fall, p.m.
do 11	13.2	34.2	31.5	Fair.
do 12	31.8	37.0	33.5	do
do 13	30.2	34.5	31.5	do
do 14	17.0	33.0	35.5	do
do 15	30.2	42.8	41.2	do
do 16	38.5	44.8	42.0	do
do 17	37.2	44.8	31.5	do
do 18	38.2	45.0	48.2	do
do 19	44.8	52.0	49.2	do squally.
do 20	34.0	49.8	42.5	do
do 21	19.5	42.0	31.0	do
do 22	23.0	47.0	40.0	do
do 23	39.0	44.5	41.5	do
do 24	28.8	47.0	28.5	do
do 25	21.5	36.2	30.0	do
do 26	20.5	44.2	30.0	do
do 27	26.0	38.8	26.0	do
do 28	25.8	44.0	40.0	do
do 29	35.2	51.5	42.0	do squally; a gale during night.
do 30	44.0	40.2	29.5	Cloudy; slight snow.
Dec. 1	26.2	29.5	26.0	Overcast.
do 2	14.0	25.5	9.2	Fair.
do 3	1.0	15.0	13.5	do
do 4	7.0	18.2	16.0	do
do 5	2.5	19.0	13.0	do
do 6	8.5	24.0	25.2	do
do 7	36.0	42.0	42.0	do
do 8	39.2	46.5	41.5	do squally.
do 9	25.2	36.2	24.8	Overcast; light rain.
do 10	25.2	22.2	13.8	Cloudy; snow.
do 11	9.8	17.0	33.5	Overcast.
do 12	24.5	29.2	28.2	do snow.
do 13	24.5	27.2	24.2	Cloudy.
do 14	16.8	26.0	23.5	Cloudy; snow.
do 15	20.0	26.2	25.2	do
do 16	29.8	35.0	38.5	do
do 17	34.0	40.5	32.8	Cloudy.
do 18	34.0	42.2	39.2	Fair.
do 19	31.2	38.0	30.2	do
do 20	35.8	48.5	32.2	Cloudy.
do 21	32.2	39.5	30.0	Fair.
do 22	19.2	40.5	28.0	do
do 23	18.2	30.0	19.8	do
do 24	19.0	33.0	21.0	Overcast.
do 25	24.0	35.8	22.8	do snow, 8.25 in.
do 26	23.0	37.2	26.0	Cloudy.
do 27	31.8	40.0	33.0	do
do 28	22.2	37.8	32.8	Fair.
1891.				
Jan. 1	15.0	34.0	19.3	do
do 2	16.2	34.8	17.5	do
do 3	16.0	31.2	28.5	do
do 4	26.8	33.5	21.0	do
do 5	17.8	30.0	18.2	do
do 6	8.8	31.8	11.0	do
do 7	1.1	19.4	13.4	do
do 8	3.9	15.2	7.3	do
do 9	3.8	20.0	10.0	do
do 10	4.4	23.1	6.0	do
do 11	0.9	23.4	18.0	do
do 12	9.8	24.0	30.0	do
do 13	18.5	31.2	24.8	do
do 14	21.8	13.5	-4.8	Cloudy.
do 15	15.0	31.5	19.2	do
do 16	29.8	36.8	30.2	do
do 17	31.8	38.0	37.0	do
do 18	36.8	45.8	41.5	do
do 19	39.0	44.2	42.5	Fair.
do 20	31.8	44.5	32.8	do
do 21	22.8	38.0	22.5	do sky cloudless.
do 22	6.0	31.2	26.5	do
do 23	15.2	31.8	28.5	do
do 24	24.8	33.8	29.0	do
do 25	27.8	33.5	30.2	do
do 26	16.0	31.0	21.0	do
do 27	8.8	26.5	14.0	do
do 28	7.5	26.0	21.0	do
do 29	12.2	32.5	26.2	Cloudy; snow, 0.75 in.
do 30	17.0	27.5	3.2	do 0.75 in.
do 31	-15.9	-12.9	-23.4	Overcast; snow, 2 in.
Feb. 1	-43.9	-9.5	-15.2	Fair; sky cloudless.
do 2	-8.4	12.2	7.8	Fair.
do 3	4.8	22.8	20.8	Cloudy.
do 4	17.0	25.8	22.0	Fair.
do 5	12.0	25.8	20.0	do
do 6	6.5	24.2	18.8	Cloudy; snow, 0.25 in.
do 7	1.5	17.8	-0.7	Fair.
do 8	-13.9	18.2	18.0	do
do 9	16.0	18.8	18.5	Cloudy.
do 10	-2.9	20.0	4.0	Fair.
do 11	0.9	25.5	22.5	Cloudy; snow, 0.25 in.
do 12	3.0	12.0	-0.5	Fair.
do 13	-13.2	-6.0	-9.2	Cloudy.
do 14	-20.9	-6.9	-11.9	Fair; sky cloudless; 3 in. snow fell during night
do 15	-12.9	4.3	-13.6	do
do 16	-30.0	10.0	-0.2	Fair.
do 17	-15.7	11.0	12.2	Fair.
do 18	4.0	22.0	11.2	do
do 19	3.0	6.0	-3.4	Cloudy; snow, 0.50 in.
do 20	-15.9	-9.0	-12.6	do do 1.00 in.
do 21	-28.7	-4.1	-17.0	do
do 22	-23.0	7.0	2.5	do
do 23	-3.0	1.0	-4.4	Overcast
do 24	-14.9	3.1	-15.0	do snow, 2.50 in

READINGS of Thermometer taken at Banff, &c.—*Continued.*

Date.	Temperature.			Weather.	Date.	Temperature.			Weather.
	7 a.m.	2 p.m.	9 p.m.			7 a.m.	2 p.m.	9 p.m.	
1891.					1891.				
Feb. 25	—31° 0'	14° 5'	8° 5'	Cloudy ; snow, 0° 50 in.	April 27	41° 2'	53° 2'	40° 5'	Cloudy ; rain.
do 26	—12° 0'	8° 5'	—14° 0'	do	do 28	39° 0'	40° 0'	35° 5'	do do
do 27	—27° 0'	15° 0'	7° 5'	Fair.	do 29	27° 2'	44° 0'	28° 0'	Overcast ; sleet and snow, 0° 25 in.
do 28	—20° 5'	8° 5'	4° 0'	Cloudy.	do 30	28° 5'	42° 2'	35° 0'	Fair.
Mar. 1	—14° 8'	9° 5'	—12° 0'	Fair.	May 1	24° 0'	40° 2'	24° 0'	Cloudy.
do 2	—32° 9'	12° 0'	—10° 0'	do	do 2	22° 2'	30° 5'	22° 0'	Overcast ; snow during night, 1° 75 in.
do 3	—17° 0'	18° 0'	9° 5'	do	do 3	20° 0'	40° 0'	32° 0'	Fair.
do 4	—16° 0'	20° 0'	0° 0'	do	do 4	31° 2'	56° 0'	45° 8'	do
do 5	—16° 0'	22° 0'	5° 0'	do	do 5	40° 8'	67° 2'	47° 0'	do rain during the night.
do 6	—13° 0'	26° 0'	21° 0'	do	do 6	39° 2'	64° 0'	44° 0'	do do
do 7	—0° 0'	26° 2'	22° 0'	do	do 7	39° 8'	43° 2'	46° 2'	Overcast ; rain.
do 8	3° 0'	31° 8'	32° 0'	do	do 8	35° 2'	44° 2'	38° 2'	Cloudy.
do 9	23° 8'	25° 2'	20° 0'	Cloudy ; snow, 0° 50 in.	do 9	40° 0'	49° 0'	34° 8'	Fair.
do 10	—8° 7'	22° 3'	10° 0'	Fair ; sky cloudless.	do 10	26° 8'	51° 8'	33° 2'	do sky cloudless.
do 11	—6° 8'	30° 0'	22° 0'	do	do 11	28° 2'	60° 0'	36° 0'	do do
do 12	3° 0'	32° 8'	15° 0'	do	do 12	32° 0'	65° 5'	46° 5'	do do
do 13	3° 8'	39° 8'	35° 0'	Fair.	do 13	33° 2'	58° 0'	48° 0'	do rain.
do 14	33° 5'	42° 2'	36° 5'	Cloudy.	do 14	35° 8'	61° 8'	47° 8'	do
do 15	34° 0'	45° 2'	40° 8'	do	do 15	33° 0'	71° 5'	51° 0'	do
do 16	36° 5'	45° 2'	37° 2'	do	do 16	37° 2'	72° 2'	53° 2'	do
do 17	27° 0'	45° 0'	33° 8'	Fair ; sky cloudless.	do 17	41° 0'	50° 0'	47° 2'	Cloudy ; rain.
do 18	28° 2'	45° 0'	33° 5'	Fair.	do 18	34° 0'	43° 0'	38° 2'	do showery.
do 19	32° 0'	42° 0'	36° 0'	Cloudy.	do 19	33° 8'	40° 0'	34° 0'	Cloudy ; light snow fell in early morning.
do 20	29° 0'	34° 8'	28° 5'	Fair.	do 20	33° 5'	55° 2'	46° 0'	Fair do
do 21	27° 2'	39° 0'	30° 0'	do	do 21	34° 0'	59° 8'	50° 2'	do sky cloudless.
do 22	23° 0'	34° 2'	19° 8'	do	do 22	32° 8'	73° 8'	52° 0'	do do
do 23	5° 0'	36° 0'	22° 5'	do sky cloudless.	do 23	38° 0'	71° 0'	50° 0'	do smoke from forest fire.
do 24	20° 0'	43° 5'	37° 0'	do	do 24	39° 5'	78° 0'	53° 0'	do do
do 25	26° 0'	41° 0'	30° 0'	do	do 25	39° 2'	72° 5'	50° 2'	do do
do 26	28° 2'	40° 2'	30° 2'	Cloudy ; snow, 0° 25 in.	do 26	41° 8'	80° 0'	52° 5'	do
do 27	24° 2'	40° 8'	28° 5'	do do 0° 30 in.	do 27	43° 0'	66° 2'	49° 2'	Cloudy.
do 28	15° 2'	41° 8'	37° 2'	Fair.	do 28	39° 8'	44° 2'	37° 2'	Overcast ; rain.
do 29	29° 2'	34° 0'	25° 8'	Cloudy.	do 29	36° 0'	54° 0'	42° 0'	Cloudy ; showery.
do 30	15° 2'	41° 0'	24° 2'	do snow, 1° 25 in.	do 30	39° 8'	55° 0'	42° 8'	Fair.
do 31	5° 0'	34° 8'	15° 0'	Fair.	do 31	44° 2'	60° 0'	45° 0'	Cloudy.
April 1	5° 5'	34° 8'	19° 0'	do sky cloudless.	June 1	41° 0'	66° 0'	50° 5'	Fair.
do 2	15° 0'	39° 2'	22° 0'	do	do 2	42° 2'	62° 2'	39° 2'	do
do 3	19° 8'	43° 5'	29° 2'	do	do 3	40° 0'	66° 2'	60° 2'	do
do 4	22° 0'	48° 0'	29° 8'	do	do 4	44° 0'	76° 0'	58° 8'	do
do 5	35° 0'	50° 5'	39° 0'	do shower.	do 5	58° 8'	53° 0'	42° 2'	Cloudy ; thunderstorm ; rain.
do 6	33° 2'	52° 0'	35° 0'	do	do 6	43° 5'	50° 0'	38° 0'	Cloudy ; frequent snow squalls.
do 7	35° 0'	54° 8'	39° 8'	do	do 7	41° 0'	52° 0'	40° 0'	Fair.
do 8	33° 0'	45° 0'	34° 0'	do	do 8	40° 0'	59° 8'	38° 2'	do
do 9	36° 2'	49° 8'	35° 0'	do	do 9	38° 8'	64° 0'	48° 0'	do rain.
do 10	34° 8'	53° 0'	37° 0'	do buffalo flowers in bloom.	do 10	40° 2'	57° 2'	45° 0'	do
do 11	36° 2'	43° 5'	33° 2'	do shower.	do 11	42° 2'	62° 0'	47° 2'	do
do 12	30° 0'	48° 5'	30° 0'	do	do 12	48° 0'	56° 2'	48° 2'	do rain.
do 13	34° 5'	56° 2'	40° 2'	do butterfly seen.	do 13	48° 0'	56° 2'	48° 2'	Cloudy ; rain during night.
do 14	23° 0'	53° 5'	33° 0'	do	do 14	45° 0'	58° 0'	40° 0'	Cloudy ; rain.
do 15	27° 2'	52° 8'	31° 8'	do	do 15	46° 2'	61° 0'	51° 0'	Fair.
do 16	26° 5'	57° 0'	40° 0'	do	do 16	45° 8'	63° 0'	47° 0'	do
do 17	28° 0'	58° 5'	35° 0'	do	do 17	50° 2'	70° 0'	52° 5'	do rain during night.
do 18	25° 2'	61° 0'	37° 2'	do	do 18	47° 2'	54° 0'	46° 5'	Overcast ; rain.
do 19	25° 0'	58° 5'	42° 5'	do shower.	do 19	42° 2'	61° 0'	47° 2'	Fair.
do 20	34° 2'	51° 2'	34° 2'	do					
do 21	28° 2'	51° 8'	49° 2'	Cloudy.					
do 22	46° 5'	54° 0'	46° 2'	do rain.					
do 23	43° 0'	39° 8'	33° 5'	do do					
do 24	27° 0'	37° 0'	29° 2'	do snow, 0° 75 in.					
do 25	28° 0'	42° 8'	29° 0'	Fair.					
do 26	28° 5'	49° 2'	40° 2'	do					

## READINGS of Thermometer taken at Banff, &amp;c.—Continued.

Date.	Temperature.			Weather.	Date.	Temperature.			Weather.
	7 a.m.	2 p.m.	9 p.m.			7 a.m.	2 p.m.	9 p.m.	
1891.					1891.				
June 20	39.8	60.5	43.0	Cloudy; rain.	Aug. 14	45.0	73.5	58.0	Fair; rain during night
do 21	40.2	61.0	45.0	do do during night.	do 15	44.0	71.8	57.0	do rain in evening.
do 22	42.2	56.0	45.5	Overcast; rain.	do 16	45.8	66.5	56.2	do
do 23	49.2	60.2	48.0	Cloudy; rain.	do 17	40.0	72.8	65.2	do
do 24	47.2	60.0	49.2	do do during night.	do 18	41.0	66.8	57.0	do heavy rain and thunderstorm in forenoon; cleared at noon
do 25	48.0	62.0	48.0	Fair.	do 19	32.2	61.8	54.2	Fair.
do 26	40.0	67.0	46.2	do rain in evening.	do 20	41.2	75.5	58.0	do
do 27	49.2	59.8	47.2	Cloudy; rain.	do 21	36.0	78.8	58.2	do
do 28	46.0	61.0	44.2	do do during night.	do 22	33.0	72.2	54.2	do
do 29	42.2	62.0	43.5	Cloudy; squally; snow fell on mountains.	do 23	36.2	78.8	56.0	do
do 30	48.2	60.0	58.2	Cloudy; showery.	do 24	37.0	72.0	52.0	do
July 1	46.6	68.8	47.8	Fair.	do 25	41.0	72.8	52.2	do
do 2	41.8	73.2	50.5	do	do 26	36.0	74.0	53.0	do sky cloudless.
do 3	47.0	78.8	56.0	do	do 27	40.2	78.8	55.8	do
do 4	52.2	68.0	47.0	do	do 28	40.0	81.8	52.0	do
do 5	50.0	60.0	47.0	do	do 29	41.2	84.2	55.0	do
do 6	41.0	62.0	39.0	do	do 30	46.2	78.0	54.8	do smoke.
do 7	39.0	58.0	53.2	Cloudy; showery.	do 31	46.0	65.0	54.0	do
do 8	51.0	61.8	50.0	do	Sept. 1	34.0	67.0	52.0	Sky cloudless.
do 9	42.8	66.0	49.8	Fair.	do 2	30.0	76.2	55.0	do
do 10	40.0	61.5	51.8	do	do 3	38.6	71.8	52.0	Sky obscured by smoke; forest fires.
do 11	47.2	61.8	52.0	do showery.	do 4	39.8	62.8	45.0	Fair; much smoke.
do 12	49.0	64.0	49.2	do rain during night	do 5	36.0	69.8	45.2	do do
do 13	40.0	71.0	49.8	do	do 6	32.8	74.2	62.0	do do
do 14	43.5	72.0	51.8	do	do 7	36.8	75.0	60.0	do do
do 15	42.2	68.0	49.5	do	do 8	47.2	70.5	52.0	do do
do 16	49.0	78.0	51.8	do	do 9	35.0	71.0	56.0	do
do 17	41.2	81.8	52.0	do	do 10	39.0	55.0	48.0	Cloudy.
do 18	48.2	74.8	49.8	do	do 11	42.0	53.0	43.0	do rain during night
do 19	47.8	71.0	51.8	do	do 12	40.0	55.2	51.0	Fair; showery.
do 20	46.2	53.8	47.2	Cloudy; rain & squally	do 13	35.2	64.8	47.0	Sky cloudless.
do 21	47.8	65.5	46.2	Fair.	do 14	33.8	66.8	48.0	do
do 22	43.8	71.0	52.0	do	do 15	43.8	56.2	48.0	Fair.
do 23	49.8	76.0	60.0	do sky cloudless.	do 16	33.2	53.0	58.8	Cloudy.
do 24	49.5	77.0	58.5	do	do 17	53.0	55.0	60.0	do heavy squalls from west.
do 25	51.2	79.8	61.8	do	do 18	61.0	56.0	45.2	do do
do 26	52.0	78.0	51.0	do thunderstorm; heavy squalls.	do 19	30.0	47.8	29.5	Cloudy; rain during night.
do 27	45.0	77.8	59.2	Fair.	do 20	29.2	48.8	38.2	Fair.
do 28	43.2	81.0	58.8	do	do 21	27.2	57.0	40.0	do
do 29	44.5	78.0	59.0	do thunderstorm.	do 22	33.8	57.8	41.0	Cloudy; rain in evening.
do 30	50.0	70.0	54.2	do	do 23	32.0	51.0	37.0	Sky cloudless.
do 31	48.8	72.2	50.8	do	do 24	32.8	48.8	52.0	Cloudy.
Aug. 1	40.0	76.5	52.0	do	do 25	46.8	64.0	50.8	do squally in evening.
do 2	45.0	79.0	54.2	do	do 26	42.2	53.0	32.2	Fair; rain during night
do 3	45.8	74.2	55.5	do	do 27	33.0	44.0	32.2	do
do 4	48.2	62.2	59.2	do sky cloudless.	do 28	24.8	42.2	34.5	Overcast; light snow fell in evening.
do 5	45.2	57.2	53.0	Overcast; rain.	do 29	33.0	40.0	36.5	Cloudy do
do 6	47.5	57.0	50.0	do do	do 30	30.0	35.5	28.5	do light snow squalls in evening.
do 7	45.0	47.0	45.0	do do in evening.	Oct. 1	20.0	45.0	28.2	Sky cloudless.
do 8	45.0	61.0	56.8	Cloudy; rain during night.	do 2	24.0	46.8	42.0	Fair.
do 9	42.5	71.0	54.2	Fair; rain during night	do 3	32.5	49.8	42.0	do
do 10	44.2	61.0	50.0	do	do 4	24.5	52.2	50.2	do
do 11	45.0	66.2	57.5	do	do 5	34.2	64.5	49.2	Sky cloudless.
do 12	40.2	64.8	59.2	do rain in morning.					
do 13	44.0	69.2	55.2	do					



READINGS of Thermometer taken at Banff, &c.—*Concluded.*

Date.	Temperature.			Weather.	Date.	Temperature.			Weather.
	7 a.m.	2 p.m.	9 p.m.			7 a.m.	2 p.m.	9 p.m.	
1891.	o	f	c	f	1891.	c	f	c	f
Oct. 6	42·2	61·5	38·2	Sky cloudless.	Oct. 22	36·5	57·0	54·0	Cloudy.
do 7	26·8	65·8	39·0	do	do 23	46·5	53·8	51·0	do rain in early morning and evening.
do 8	27·0	65·5	43·0	do	do 24	41·2	49·8	45·2	Cloudy; rain in early morning.
do 9	27·2	65·5	40·0	do	do 25	37·0	45·0	32·2	do do
do 10	30·0	52·5	41·0	Cloudy; rain.	do 26	26·8	52·8	43·0	do rain in evening.
do 11	36·2	43·0	32·2	Overcast; rain during night.	do 27	36·8	53·2	40·0	Cloudy.
do 12	23·0	41·0	30·0	Sky cloudless.	do 28	33·0	43·5	38·5	do rain in early morning.
do 13	23·8	49·8	32·2	do	do 29	34·2	35·8	26·8	Overcast; rain during night; light snow in evening.
do 14	26·0	56·0	39·2	Fair.	do 30	17·5	25·8	19·8	Fair.
do 15	26·8	44·2	34·2	Cloudy.	do 31	8·8	26·5	14·0	do
do 16	24·8	45·2	35·2	Fair.					
do 17	26·0	45·8	43·5	Cloudy.					
do 18	43·2	58·8	57·5	do squally.					
do 19	45·0	37·8	32·2	do					
do 20	23·0	47·0	31·0	Fair.					
do 21	25·5	52·8	31·0	do					

JOHN MACLEOD,  
*Observer.*

BANFF, 8th December, 1891.

TEMPERATURE and Precipitation at Rocky Mountains Park, Banff, N.W.T.,  
November, 1890, to October, 1891.

Month.	Temperature of Air.			Precipitation.		Remarks.
	Mean.	Highest.	Lowest.	Amount.	Number of Days.	
1890.	° /	° /	° /	In.		
November.....	34·8	54·3	9·0	.....	2	
December.....	27·5	49·5	— 3·4	0·94	7	
1891.						
January.....	20·9	46·0	—23·1	0·35	3	
February.....	— 0·9	26·2	—45·2	0·70	6	
March.....	21·7	45·0	—32·9	0·23	7	
April.....	36·8	61·3	— 2·0	1·08	9	
May.....	43·6	80·2	16·5	1·37	10	
June.....	49·1	77·4	27·1	2·69	15	6th, snow squalls.
July.....	55·1	82·7	30·4	1·29	5	
August.....	55·3	84·2	29·9	1·43	11	
September.....	46·5	77·2	23·4	0·36	10	28th, light snow.
October.....	38·5	66·0	8·0	2·07	8	

## EXPENDITURE ON WORKS.

On what Expended.	Amount.
	\$ cts.
Roads.....	8,635 78
Buildings.....	938 22
Surveys.....	14 00
Water Works.....	136 90
Caretakers' Salaries.....	180 00
Clearing Land.....	271 00
Contingencies.....	472 49
Total.....	10,648 39

## CANADIAN PACIFIC HOTEL, BANFF.

VISITORS from 1st November to 3rd December, 1890, and from 20th April to 31st October, 1891. Hotel closed between 4th December, 1890, and 19th April, 1891.

Where from.	Number.
United Kingdom.....	494
Canada.....	861
India.....	5
Australia and New Zealand.....	41
West Indies.....	1
United States.....	1,887
China.....	44
Japan.....	25
Germany.....	4
France.....	11
Italy.....	2
Denmark.....	2
Belgium.....	2
Holland.....	2
Central America.....	1
Hawaiian Islands.....	7
Total.....	3,389

## SANITARIUM.

VISITORS during the Year ending 31st October, 1891.

Where from.	November, 1890.	December, 1890.	January, 1891.	February, 1891.	March, 1891.	April, 1891.	May, 1891.	June, 1891.	July, 1891.	August, 1891.	September, 1891.	October, 1891.	Totals.
Canada.....	213	305	304	256	179	192	198	197	282	278	209	161	2,774
United States.....	17	16	3	11	2	4	6	5	16	10	23	12	125
England.....	4	1	2	5	1	...	1	1	2	12	8	5	42
China.....	...	...	...	1	...	...	...	...	...	...	1	1	2
India.....	...	...	...	...	...	...	...	...	...	...	...	...	1
New Zealand.....	...	...	...	...	...	...	...	...	...	...	...	2	2
Totals.....	234	322	309	273	182	196	205	203	300	300	241	181	2,946



FAIR-VIEW HOTEL, HOT SPRINGS, BANFF.

VISITORS during the Year ending 31st October, 1891.

Where from.	November, 1890.	December, 1890.	January, 1891.	February, 1891.	March, 1891.	April, 1891.	May, 1891.	June, 1891.	July, 1891.	August, 1891.	September, 1891.	October, 1891.	Totals.
Canada .....	19	15	16	9	19	33	35	41	76	75	60	17	415
United States .....				1		1	5	5	3	13	17	2	47
England .....										3	1	2	6
France .....	1												1
Germany .....									2				2
Totals .....	20	15	16	10	19	34	40	46	81	91	78	21	471

BEATTIE'S HOTEL, HOT SPRINGS, BANFF.

VISITORS during the Year ending 31st October, 1891.

Where from.	November, 1890.	December, 1890.	January, 1891.	February, 1891.	March, 1891.	April, 1891.	May, 1891.	June, 1891.	July, 1891.	August, 1891.	September, 1891.	October, 1891.	Totals.
Canada .....	37	35	35	42	41	37	34	32	36	46	21	24	420
United States .....				7		2		10	3				22
England .....										1			1
New Zealand .....							1						1
Totals .....	37	35	35	49	41	39	35	42	39	47	21	24	444

## CAVE AND BASIN.

NUMBER of persons registered from 1st November, 1890, to 31st October, 1891.

Where from.	November, 1890.	December, 1890.	January, 1891.	February, 1891.	March, 1891.	April, 1891.	May, 1891.	June, 1891.	July, 1891.	August, 1891.	September, 1891.	October, 1891.	Totals.
Canada .....	226	106	66	50	93	186	315	453	505	683	447	279	3,409
United States .....	15	5	5	3	...	11	56	167	331	201	202	62	1,058
England .....	16	3	2	4	1	9	40	46	87	46	75	24	353
Scotland .....	3	...	...	...	...	...	6	3	13	17	6	7	55
Ireland .....	1	...	...	...	...	2	2	...	3	2	1	...	11
India .....	...	...	...	...	2	5	...	...	9	3	2	1	22
Australia .....	...	...	4	...	3	...	4	2	2	12	4	5	36
China .....	1	...	...	...	...	...	...	4	9	2	7	7	30
France .....	1	...	...	...	3	4	1	4	1	4	1	1	20
Japan .....	...	...	...	...	...	8	6	2	4	4	3	2	29
Wales .....	1	...	...	...	...	1	2	2	6	1	2	...	15
Germany .....	...	...	...	...	...	...	3	4	7	5	...	...	19
Java .....	...	...	...	...	...	...	3	4	1	4	...	...	12
Holland .....	...	...	...	...	...	...	...	...	5	...	...	...	5
Italy .....	...	...	...	...	...	...	...	...	...	...	2	...	2
Totals .....	264	114	77	57	102	226	438	691	983	984	752	388	5,076

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PART VI

DEPARTMENT OF THE INTERIOR  
TOPOGRAPHICAL SURVEYS BRANCH  
GENERAL REPORT OF OPERATIONS

FROM

1869 to 1889

Together with an Exposition of the System of Survey of Dominion  
Lands, and a Schedule of

DOMINION LAND AND TOPOGRAPHICAL SURVEYS

BY

W. F. KING, B.A., D.T.S., Chief Astronomer of the Department of the Interior,

AND

J. S. DENNIS, D.T.S., Chief Inspector of Surveys.

FEBRUARY, 1892.

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DEPARTMENT OF THE INTERIOR,  
TOPOGRAPHICAL SURVEYS BRANCH,  
OTTAWA, 12th February, 1892.

SIR,—The surveys performed under the Topographical Surveys Branch of the Department of the Interior have been of varied character. The primary object has been the division of land for the purpose of settlement, and hence the bulk of the work has consisted of block, township outline, and township subdivision surveys, together with surveys of parishes and town plots. Other surveys have from time to time, in connection with these, become necessary, such as trail surveys, surveys of Indian reserves, exploratory and micrometer surveys, triangulation and phototopographical surveys, determinations of latitudes and longitudes, &c.

Altogether a very large amount of work has been performed, and although much of the information concerning it is contained in the reports of the Department of the Interior published yearly, yet the necessity of a general report of all the operations, for use as a book of reference, has become apparent.

With the hope of supplying this want, we have the honour to submit herewith the first two sections of such report. The first section contains a historical narrative of the surveys, with schedules showing the names of all surveyors employed, together with the work performed by each, also all trail surveys, reserves for the Hudson's Bay Company, Indian reserves surveyed under the Department of the Interior, micrometer and exploratory surveys, correction of resurveys, acreage of the yearly surveys, and all surveys of parishes, town plots and other miscellaneous work. It also contains a list of all Dominion land and topographical surveyors.

The second section treats of the theory of the Dominion lands system of survey, and contains a number of geodetic tables useful in calculations connected with surveys under the system, and an explanation of the method of using them.

We have prepared this report in the hope that it will be found useful as a book of reference in all matters connected with the surveys, and to that end we have made it as complete as possible in the lines indicated.

It is proposed to supplement the information herein contained by the issue from time to time of additional sections giving fuller details of the various operations.

We have the honour to be, Sir,

Your obedient servants,

W. F. KING,  
*Chief Astronomer.*

J. S. DENNIS,  
*Chief Inspector of Surveys.*

E. DEVILLE, Esq.,  
Surveyor General,  
Topographical Surveys Branch.





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SECTION I.

A SHORT HISTORY OF THE SURVEYS PERFORMED

UNDER THE

DOMINION LANDS SYSTEM

1869 TO 1889

BY

J. S. DENNIS, D.T.S., Chief Inspector of Surveys.

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## SECTION I.

## A SHORT HISTORY OF THE SURVEYS MADE UNDER THE DOMINION LANDS SYSTEM 1869 TO 1889.

## NARRATIVE.

The history of the surveys performed under the Dominion Lands System begins in the year 1869, shortly after the territory of Rupert's Land was acquired by the Dominion of Canada by purchase of the rights of the Hudson's Bay Company. Previous to that date, the only surveys, other than explorations, which had been effected in the territory purchased, covered a narrow belt of lots fronting on the Red and Assiniboine Rivers, and extending a short distance up and down these streams from their junction at Fort Garry. These surveys had been performed by Messrs. Sabine and Goulet, under instructions from the Hudson's Bay Company, with the object of defining the boundaries of holdings granted by that company to settlers living along these rivers.

As it was thought that a large portion of the newly acquired territory was good agricultural land, well adapted for successful farming operations, and it being expected that a large influx of immigrants would follow the transfer of the country to the Dominion, it was realized that one of the first duties of the Government was to devise and adopt a comprehensive scheme or system upon which to conduct the surveys of the country, and to proceed with the survey of such portions as were likely to be required for immediate settlement. To the Department of Public Works was relegated this important duty, and on the 10th July, 1869, instructions were issued by the Honourable the Minister of Public Works to Lieut.-Col. J. S. Dennis, Provincial Land Surveyor, instructing him to proceed to the Red River district to examine the country in the vicinity of Fort Garry, and to suggest a scheme or system upon which to base the surveys which were to be undertaken. He was accredited to the Crown Lands Departments both in Canada and the United States, with the object of procuring all the information and advice possible to aid him in drawing up the scheme or system for adoption by the Government.

Arriving at Fort Garry in August of that year, the country bordering the Red and Assiniboine Rivers and vicinity was examined, and after giving due weight to the information received from those competent to advise on the subject, a system for the survey of the country first into townships and then into farms was drawn up, and, with illustrating sketches, was forwarded to the Government under date the 28th of August, 1869. The proposed system was approved, and was brought into force by an Order in Council dated the 23rd of September, 1869, the Order in Council being based upon a memorandum from the Hon. Wm. McDougall, the then Minister of Public Works, who forwarded the proposed system and recommended its adoption.

The system adopted contained many points of difference from that now in force, and being of interest from an historical standpoint, it is here given *in extenso* :—

“PROPOSED METHOD FOR THE SURVEY OF THE PUBLIC LANDS IN THE NORTH-WEST TERRITORIES.

“1. The system to be rectangular; all townships to be east and west or north and south.

“2. The townships to number northerly from the 49th parallel of latitude and the ranges of townships to number east and west from a given meridian, this meridian to be drawn from the 49th parallel at a point say ten miles west of Pembina, and to be called the Winnipeg Meridian.

“3. The townships to consist of 64 squares of 800 acres each, and to contain, in addition, 40 acres, or five per cent in area in each section, as an allowance for public highways.

“4. The townships on the Red and Assiniboine Rivers where the same had ranges of farm lots laid out by the Hudson Bay Company, to be surveyed, the broken sections abutting against the rear limits of such ranges, so as to leave the same intact as independent grants.”

In submitting the above system, it was represented as being well adapted to the country to be surveyed. In devising the system, the views of those well versed in surveying operations, both in Canada and the United States, were made use of, and the following facts were offered in support of the scheme proposed:—

In comparing it with the American system then in force in most of the western states and territories, it was noted that in the latter there was no provision made for public roads, the area required for this purpose being subsequently taken by expropriation from out of the net area acquired by the settlers.

It was also suggested that the townships in the American system were unnecessarily small, and it was pointed out that in an open or prairie country the facilities for communication are greatly in excess of those in a broken or wooded country, and the larger townships were advocated in consequence of the economy which would result in the administration of municipal affairs.

The numbering of the townships north from the international boundary line and the numbering of the ranges east and west from a principal meridian, was recommended on account of its simplicity and the facility which it afforded for easy description in disposing of the Crown lands.

In the interval between the date of sending the proposed system and the receipt of further instructions as to its adoption or otherwise by the Government, it was decided to carry on the survey of the Winnipeg or Principal Meridian referred to in the scheme submitted. In doing this, an approval of the scheme was anticipated which might not have been obtained, but no doubt it was realized that any scheme adopted would, in its main features, resemble the one proposed, and would authorize the survey of the country into rectangular townships.

The line which it was proposed to run would serve as a base or initial meridian for any system decided upon, and in consequence of the absence of surveys of any kind from which a survey under a defined system could be begun, some line had to be adopted and surveyed as a starting point.

In the absence of information on the subject, it is impossible to say why the particular location in which the Winnipeg Meridian was run was adopted, but no doubt, judging from the information which we now have regarding the country traversed by this meridian, it was so located as to avoid the belt of timber along the Red River, and at the same time not too far west of the river to be readily available for the dependent surveys which it was proposed to effect in the vicinity of Fort Garry. It would seem that the intention was, pending the receipt of instructions regarding the adoption of the system proposed, to survey and mark the Winnipeg Meridian from the boundary line as far north as Township 11 in the proposed system, and then to project the line between Townships 6 and 7 easterly, and to subdivide a small tract in the vicinity of Oak Point. This was done, and it may be referred to as the first survey performed under authority of the Dominion Government in the territory of Rupert's Land.

In the fall of 1869, the outbreak known as the Red River troubles occurred, and this put an end to the surveys for the time being.

During the year 1870, nothing in the way of surveys was undertaken, but the subject of the future surveys, and the system to be followed, received considerable attention, and towards the end of the year steps were taken to amend the system authorized by the Order in Council of September, 1869. The Government was no doubt largely influenced in the decision to alter the system adopted, by the views of the Hon. (now Sir) Adams Archibald, the Lieutenant Governor of the newly created Province of Manitoba. The views of the Lieutenant Governor were very fully set forth in a despatch to the Secretary of State, under date the 20th September, 1870. By permission, the following notes taken from this despatch are here given in explanation of the very material change which was shortly to be made in the system authorized.

It was pointed out by the Lieutenant Governor that, while the general principle of the survey of the country into rectangular townships was a good one, at the same time he considered the townships too large; it was also noted that for a very long



time the American Government had been carrying on their land surveys under a system which provided for townships six miles square and containing 36 sections of 640 acres each, and that these sections were again subdivided into quarter sections of 160 acres each. Attention was drawn to the fact that many states of the Union had been laid out and peopled under this system, and, further, it was urged that, as the State of Minnesota and the Territory of Dakota, which would be surveyed under this system, adjoined our territories, and the two systems would be continuous, there were strong reasons for making our system somewhat analogous to theirs. Again, the American system being known all over the world to the emigrant classes, and a lot of 160 acres being the acknowledged extent of an emigrant's requirements for farm purposes, any change from that system, it was claimed, would act disadvantageously to our country. In reference to the 5 per cent of the acreage of each lot set aside for roads under the system authorized, the Lieutenant Governor urged that this system would act unfairly, for while one man's farm might be badly cut up by a road, his neighbour, subject nominally to the same charges, might escape altogether, and he therefore recommended a fixed allowance for roads as being the fairest method of providing for public highways.

In January, 1871, Col. Dennis submitted a memorandum in reference to the proposed change in the system in force; he recommended that "the system of survey be altered, retaining the rectangular principle, but making the townships six miles square, with road allowance on all section and township lines of 1·50 chains wide." This memorandum contained some additional recommendations regarding the boundaries of the newly constituted Province of Manitoba, and in reference to the disposal of certain lands within that province, but these latter recommendations had no bearing on the survey proper.

On the 7th of March, 1871, Col. Dennis was appointed Surveyor General of Dominion Lands, and during the same month the control and administration of the Dominion Lands was transferred to the Department of the Secretary of State, and a branch of that department called the "Dominion Lands Branch," was created.

We now come to what may be termed the starting point of the great work of surveying the vast country which had been acquired by the Dominion, and since this date the work has gone steadily on each year. The first important point requiring consideration and settlement, was the question of the proposed change in the system; the recommendations of the Lieutenant Governor and Col. Dennis seem to have met with favourable consideration, for we find that in April, 1871, on the recommendation of the Hon. the Secretary of State, an Order in Council was passed, bringing the new system into force, and on the 1st of May, of the same year, a manual of surveys was issued by the Surveyor General, explanatory of the system which had been adopted, and for the guidance of the deputy surveyors, as they were then called, who were to be employed in surveying Dominion Lands. This manual remained in force for some years, and as under its provisions a large portion of the country was surveyed, and as it was the basis for the new or amended manuals which have since been issued, its main features will be briefly referred to; it provided:—

"(1.) The public lands in Manitoba and the North-West Territories are to be laid off in rectangular townships, containing thirty-six sections of one mile square in each, together with road allowances between all townships and sections, of one chain and fifty links in width.

"(2.) The townships, therefore, will, subject to deficiency or surplus from converging or diverging meridians, as the case may be, measure on each side from centre to centre of the road allowances bounding the same, four hundred and eighty-nine chains.

"(3.) The townships will number in regular order northerly from the international boundary, or forty-ninth parallel of latitude, and will lie in ranges, which will be numbered, in Manitoba, east and west from a certain principal meridian, run in the year 1869 and styled the 'Winnipeg Meridian,' which starts from the said forty-ninth parallel at a point ten miles or thereabouts, westerly from Pembina.

"(4.) The said forty-ninth parallel or international boundary is the first base, or that for townships one and two; the second base will be between townships four and five; the third between townships eight and nine; the fourth between townships twelve and thirteen; the fifth between townships sixteen and seventeen, and so on northerly in regular succession.

"(5.) The correction lines, or those upon which will be allowed the 'jog' resulting from want of parallelism of meridians, will be as follows, that is to say: on the line between townships two and



three, on that between six and seven, on that between ten and eleven, and so on. In other words they will be those east and west township lines which are equi-distant from the bases.

"(6.) In the survey of any and every township, the deficiency or surplus resulting from convergence or divergence of meridians is to be set out and allowed in the range of quarter sections adjoining the west boundary, and the north and south errors in closing on the correction lines from north and south is to be allowed in the ranges of quarter sections adjoining, and north or south respectively of the said correction lines.

"(7.) The dimensions and area of the irregular quarter sections resulting as above, whether the same shall be deficient or in excess, must in all cases be returned by the surveyor at their actual measurements and contents.

"(8.) Preliminary to the subdivision into townships and sections of any given portion of country proposed to be laid out for settlement, the same will be laid out into blocks of four townships each, by projecting the base and correction lines, and north and south lines (to be designated 'meridian exteriors.')

"(9.) On these lines, at the time of such survey, all township, section and quarter section corners are to be marked, which corners are to govern respectively in the subsequent subdivision of the block.

"(10.) Only a single row of posts or monuments to indicate the corners of townships or sections (except as hereinafter provided) will be placed on any survey line. These posts or monuments, as an invariable rule (with the exception above referred to) are to be placed in the west limit of the road allowance on north and south lines, and in the south limit of the road allowances on east and west lines, and in all cases will fix and govern the position of the boundary corners between the two adjoining townships, sections or quarter sections on the opposite side of the road allowance.

"(11.) The exception above referred to is in the case of the township, section and quarter section corners on the correction lines, which in all cases will be planted and marked independently for the townships on either side. Those for townships north of the line in the north limit of the road allowance, and those for townships south, in the south limit."

The manual contained detailed instructions for the guidance of deputy surveyors engaged in surveying Dominion Lands under the above system, and also much general information regarding the surveys.

The system and the manner of effecting the surveys under it are so exhaustively treated of further on in this report that it is not necessary to speak further on this point here.

With the issue of the manual the survey of Dominion Lands was actively begun, and it is proposed, in the following pages to give a short account of their prosecution since that date.

For convenience of reference, and as the most ready method of writing of the surveys since performed, each season's surveys are treated of by themselves, beginning with those of the season of 1869.

#### SEASON OF 1869.

The inception of the surveys during the early part of this year has already been referred to. The report regarding the system which it was proposed to follow in carrying them on was forwarded from Fort Garry about the end of August, and immediately afterwards the actual field work was begun at Pembina by a series of observations for latitude to determine the position of the 49th parallel.

These observations placed the boundary between the United States and the Territories about 200 feet further north than that determined some years previously by General Pope of the United States army.

Beginning from the point established by these observations, the 49th parallel was produced for a distance of ten miles west of the Red River and from there the survey of the Winnipeg or Principal Meridian was begun.

In establishing this portion of the 49th parallel it was found that the line surveyed from General Pope's post by American surveyors crossed the line run from the post established by Colonel Dennis, and that posts and mounds placed to mark sections in townships south of the boundary line stood on the north side of the latter line.

This fact was reported to the Government and their attention was drawn to the necessity for a joint commission to settle the position of the international boundary west of the Lake of the Woods.

By 28th September the Principal Meridian was completed up to the Assiniboine River, being marked with posts and mounds in accordance with the system submit-

ted. From this point the further production of the meridian was assigned to M. Hart, P.L.S., and a second party under the charge of Major Webb, P.L.S., was organized and started on the survey of the base line between Townships 6 and 7 from the meridian easterly to Oak Point.

Colonel Dennis then returned to Winnipeg and commenced the compilation of a map of that portion of the country between the Lake of the Woods and Fort Ellice and from the boundary line north for one hundred and twenty-five miles. It was proposed to show on this map the projected townships in accordance with the system approved, and the manner in which the convergence of meridians, &c., was to be allowed for. The work on this map, when nearly completed, had to be abandoned on the 30th of October owing to the political troubles which then broke out.

Mr. Hart had continued the Principal Meridian up to Township 11 and then turned west on the base between Townships 10 and 11 with the object of projecting it west as far as Portage la Prairie. However, after running this line a short distance west, he struck Shoal Lake.

He then returned to the meridian and, beginning at the line between Townships 9 and 10, produced it west across Range 1, then turning north he produced the meridian between Ranges 1 and 2 to Shoal Lake, and returning to the base he continued its production west, and had finished the greater part of Range 2 when the outbreak occurred.

The party was then withdrawn from this point and spent the remainder of the season in running the exterior lines of the townships lying between the Principal Meridian and the Red River, north of Township 8.

Major Webb had begun the production of the base line between Townships 6 and 7 from the Principal Meridian east, and had nearly reached the Red River when he was stopped on the 11th of October by a party of the discontented half-breeds; his party was, therefore, withdrawn and spent the remainder of the season in running the exterior township lines north of the Assiniboine River and east of the Principal Meridian, and in the survey of the lots of the settlement belt along the Assiniboine.

The field work was finally stopped on the 1st of December, the surveyors and several of the members of their parties being enrolled among those who were organized as a military force with which an attempt was to be made to restore order in the country.

On the 11th of December this force was disbanded, and an effort was made to continue the surveys; this, however, failed, and nothing further was done.

The following is from Colonel Dennis's report regarding the work accomplished up to the date at which surveys were stopped :—

“ Meridian lines and east and west township exteriors drawn on the ground and marked by posts and mounds at quarter section . . . 182 miles.

“ Survey of settled farms on west side of Red River and below parish of St. John's, and up the Assiniboine on north side between Fort Garry and Silver Heights (or a little beyond the latter, near Sturgeon Creek) ascertaining the present actual boundaries and position of buildings, situation of roads, and traverse of river in front . . . . . 20,000 acres.

“ OFFICE WORK.

“ (1.) Map on large scale, embracing country from Lake of the Woods to Fort Ellice, and from 49th parallel north for 125 miles.

“ (2.) Prepared one plan on scale of 60 chains to an inch, showing the Hudson's Bay Company's grants on Red and Assiniboine Rivers, as copied from their maps, and also showing where the township exteriors, according to the system decided upon, will intersect the same.

“ (3.) One finished township plan on scale of 40 chains to an inch.

“ (4.) Two finished tracings of Hudson's Bay maps, showing grants so far recorded.”

Considerable work was also done in connection with preparing copies of the Hudson's Bay Company's land register having reference to the lots granted along the Red and Assiniboine Rivers.



SEASON OF 1870.

On the 20th of May of this year, the Act setting apart a portion of the territory of Rupert's Land as the Province of Manitoba was assented to, but, owing to the disturbed state of affairs in that province, nothing in the way of surveys was undertaken during this year.

SEASON OF 1871.

The adoption of an amended system of surveys and the appointment of the Surveyor General in the early part of this year have already been referred to.

With the formation of the Dominion Lands Branch of the Department of the Secretary of State, and the issue of the Manual of Surveys, the survey into townships and sections of the immense territory was begun.

Instructions were issued to twenty-one deputy surveyors who were to be employed on the season's surveys; of these, fifteen were to be engaged in surveying block outlines and effecting subdivision surveys. The remaining six carried on surveys in the settlement belt along the Red and Assiniboine Rivers.

The number of surveyors employed, and the extensive field included in the surveys, rendered the appointment of an inspector necessary.

Mr. Lindsay Russell, who had visited the Red River country as far back as 1858-59, was offered this position, and in July became Inspector of Surveys. He had charge of the surveys in the field, and during the season visited many of the parties employed.

All the surveys during this season were performed under contract at so much a mile. The schedule of rates paid under these contracts was as follows :—

SCHEDULE OF RATES.

Character of Survey.	1st Class.	2nd Class.	3rd Class.
	Open Prairie.	Poplar Woods.	Other woods—Heavy timber, windfall, or dense bottom scrub with vines or thick willow, hazel, etc.
	Per mile.	Per mile.	Per mile.
Block surveys .....	\$9 00	\$15 00	\$25 00
Subdivision surveys .....	7 00	11 00	18 00

The surveys during the season were much delayed, owing to extensive fires and the resulting smoke. Several of the parties were burnt out and lost everything, and in one or two cases the members had narrow escapes from the fire.

The Fenian "raid" into Manitoba, in the fall of this year, also retarded the work, but in spite of these drawbacks a very fair amount of work was done, as will be seen from the following extract from the report of the Inspector of Surveys:—

"The total amount of the season's work, reckoning it by mileage of line surveyed is to the nearest mile as follows :—

	Miles.
Block surveys.....	1,207
Subdivision surveys.....	1,406
Settlement surveys, equivalent to above subdivision line.....	1,200
Total .....	3,813

This amount of line surveys into farm lots an area of 1,535,530 acres."

The work carried on by the surveyors in the settlement belt was of a somewhat tedious and unsatisfactory nature. Their survey was only of a preliminary character so as to provide information for the compilation of plans upon which were to be



arranged the exact boundary lines of individual occupancies, and these limits had then to be marked on the ground.

Owing to the scattered way in which the claimants of lots in the settlement belt had erected their dwellings and effected their improvements, the work of defining their holdings was necessarily slow.

The surveyors employed on these latter surveys were paid at the rate of \$13.60 per day, which covered all charges for pay and subsistence of the surveyor and his party.

#### SEASON OF 1872.

The surveys during this season showed considerable expansion, as compared with those of the previous year.

Forty-six surveyors, in addition to the Inspector, Mr. Lindsay Russell, and Messrs. Milner Hart and A. H. Whitcher, who had been appointed Assistant Inspectors, were employed.

The necessary working parties for this staff involved a force of about 400 men, with 100 horses and carts for transport service. This gave many of the newly-arriving immigrants remunerative employment, and afforded them an opportunity to acquire, in the course of the surveys, a knowledge of the country valuable to them, when deciding as to the locality in which they would settle.

To insure that these numerous survey parties should incur no loss of time through difficulty of obtaining sufficient and wholesome supplies, large quantities of provisions consisting of bacon, biscuit, dried fruit, compressed vegetables, &c., were procured and forwarded to Manitoba, and there furnished the surveyors at cost price. This, of course, entailed a considerable amount of labour on the part of those looking after the surveys, but it was hoped that the progress of business in Manitoba would soon reach such limits that sufficient supplies could be furnished by private enterprise at reasonable cost.

The surveyors employed this year were divided as follows:—Eight were engaged in running block outlines; twenty-three carried on township subdivision surveys; five were employed in the surveys of the settlement belt parishes, and five were engaged in making explorations at different points in advance of the surveys.

The reserves granted to the Hudson's Bay Company at certain of their posts under the deed of surrender required survey. Instructions were issued to Mr. W.S. Gore, P.L.S. (now Assistant Commissioner of Lands and Works of British Columbia), to carry out this work, and he was also instructed to collect all information possible in travelling from one post to the next. This work was expected to occupy Mr. Gore for two years.

The following is the number of miles of line surveyed during the season:—

	Miles.
Block lines.....	1,019.22
Subdivision lines.....	10,147.00
Settlement belt surveys.....	532.00
Total.....	<u>11,698.22</u>

The surveys during this season, as in 1871, were all performed by contract, at so much per mile, but toward the end of the season, the surveyors engaged on block work represented to the Inspector the difficulty of carrying on these surveys under contract, at previously stipulated prices per mile, and represented that the method of paying for the surveys, most likely to be fair, alike to the Government and to the surveyor employed, was that of daily pay and allowances.

Upon their representations the Inspector reported as follows:—

“The contract system suited well the conditions of character of country and facilities for transport that existed at the outset of most of the block surveys, and in anticipation of which conditions the prices allowed were fixed; but the country to be surveyed proved not to be nearly as uniform in character as was expected, much less of it than had been estimated was found to be open prairie.

Obstacles to progress, in the shape of extensive marshes, thick woods, windfalls, &c., occurred, presenting varying degrees of difficulty and delay, to arrange prices corresponding to the different shades of which would be impracticable. Some surveyors who were fortunate enough to fall in good country, realized fair remuneration from their contracts, but the majority would not, unless some consideration beyond the terms of their contract were allowed for special difficulties encountered. This might at first sight seem simple to remedy, by allowing higher rates per mile for lines run in certain kinds of country; but the difficulty of so doing justly by both parties to the contract, lay in the impossibility of estimating beforehand for an unknown tract of country, to what extent obstacles to survey existed, and precisely what increase of cost they entailed. Only by fixing a rate per mile, so high as to be more than work of average difficulty would be worth, could it be ensured to the surveyor that he would in all cases make his fair daily pay. An average price though fair to the surveyors as a body, might prove exceedingly unjust to the individual. The cases of the block and the subdivision surveyors are widely different. The former, besides being the pioneer of the latter, extend over distances in some cases reaching a hundred miles and more, with consequent vicissitudes in the survey of the line and transport of supplies, that the varying character of the country traversed would produce. For example, one surveyor in the course of his season's work had cut 30 miles of road through the woods, to enable his carts to follow him with his supplies. Another, not very remote from him, worked all summer on open plain, where his horses hardly ever required to deviate from the line he was running. Where in the matter of transport, delay had cost the first surveyor weeks of his whole party's pay and food, they had not cost the second an hour. The contract price to each of these was not the same, but it was difficult, until the work was done, and actual cost known, to assign a difference in price per mile run that would exactly meet the circumstances.

"Their case thus set forth by the block outline surveyors is fairly stated. I would add thereto, in favour of their being remunerated by daily pay and allowances, that under the contract system, adverse circumstances, such as bad weather, difficult country, &c., act as a pressure on the surveyor to slight his work in his endeavour to make up, by hurrying through it, for lost time. It sometimes occurs at governing points, when, by the rules laid down to him, the surveyor should before proceeding further, check his positions by astronomical observation, that he is kept, with his whole party idle, waiting days for the requisite clear weather. He is here, by the dead loss of his disbursements for pay and expenses of a large and costly party, and of his own time, tempted to disregard his instructions, to proceed with his line and to assume that it is correct, thus involving that very liability to error against which the rule was intended to guard. As the subdivision of a township is confined to a distance each way of six miles, and its character is by the previously made block survey, to a great extent known, the contract system can be successfully applied to subdivision surveys."

The representations of the surveyors employed, aided largely no doubt by the Inspector's report, seem to have had the desired result, for the rule was adopted that all future block and outline surveys were to be performed under daily pay and allowances, and that subdivision surveys only should be made under contract. This rule has remained in force ever since, and there is every reason to suppose that the work has been much more carefully performed than it would have been if effected under contract.

A map showing the surveys completed in Manitoba and the North-West Territories was issued with the Surveyor General's report of this year. It is introduced here, being of interest as the first map issued to show the results of the surveys of Dominion Lands, and also the first official map of the Province of Manitoba.

In April an Act was passed called the "Dominion Lands Act" in which the manner of administering the lands in Manitoba and the North-West Territories was dealt with, and the system of survey explained. The Act also provided for the formation of a Board of Examiners who were to examine candidates for admission to practice as deputy surveyors, and provided for the admission to practice of surveyors from the different provinces.

With the passing of this Act the persons employed in surveying Dominion Lands were given the distinctive title of deputy surveyor. This title has since been changed, and numerous alterations have been made in the law regarding the qualifications necessary to be admitted to practice.

In the autumn of this year a joint British and American Commission commenced the survey of the international boundary between the North-West Territories and the United States, from the north-west angle of the Lake of the Woods to the summit of the Rocky Mountains.



## SEASON OF 1873.

Thirty-four surveyors were employed during this season. They were divided as follows:—Four were engaged on block surveys, one in the survey of reserve for the Hudson's Bay Company, and twenty-nine in subdivision surveys.

The representations of the Inspector regarding the payment of block surveyors by the day instead of by contract having been favourably considered, we find that during this year all the surveyors, except those employed in effecting subdivision surveys, were paid by the day, and the system of payment, inaugurated at this time, has remained in force ever since.

In May the Bill creating the Department of the Interior was assented to, and on the 30th of June the management and control of Dominion Lands was transferred from the Department of the Secretary of State to the newly constituted Department of the Interior. The Geological Survey was also at this time attached to the Department of the Interior, which was also charged with the administration of Indian Affairs.

## SEASON OF 1874.

The ordinary surveys were on a somewhat more limited scale during this season than they had been during the two previous years.

In the work of block and subdivision surveys eighteen surveyors were employed; of these, two were engaged in block outlines, and the others in subdivision or settlement belt surveys.

The survey in detail of all the holdings in the several parishes fronting on the Red and Assiniboine Rivers was completed.

The decision arrived at in September, 1873, conceding the land covered by the hay and common privilege in the "outer two miles" to the owners of front lots in certain of the parishes fronting on the Red and Assiniboine Rivers, necessitated the survey of the "outer two miles" to correspond with the river front lots.

A force of surveyors was detailed for this work, under the direction of Mr. Whitcher, one of the inspectors of surveys, and the larger part of the field operations was completed before the close of the season.

The lands reserved to the Hudson's Bay Company, under the deed of surrender, at several posts in the Lac la Pluie district were surveyed by Mr. D.L.S. Miles.

During this season the first surveys of Indian reserves were undertaken. On this work six surveyors were engaged, and reserves were laid out at several points in Manitoba and the North-West Territories.

## SPECIAL SURVEY.

In February an Order in Council was passed authorizing a special survey of bases and meridians through the North-West Territories, and extending to Peace River. This was the most important surveying work undertaken by the Government since the acquisition of the territory, and a short description of its objects, and of the work effected during the season, will be of interest.

The objects of this survey were:—

1. To establish a practical ground-work for the extension of township surveys at any point along the line of the proposed route for the Canadian Pacific Railway, thus tending by systematic settlement to the development of the country.

2. To contribute towards the construction of the railway by facilitating the location of the land grant along the line.

3. To obtain a knowledge of the character and resources in the way of soil, timber and minerals, as also of the flora and fauna, of the territories covered by the survey.

To the above may be added the possibility that data of value would be obtained for estimating the length of a degree of the meridian in the region covered. This will be understood when it is said that the work was intended to extend over some twelve degrees of latitude, and that all possible precision was to be aimed at in carrying on the work.



With this view, in addition to laying down the actual lines of the meridians and bases throughout the country, which was to be performed by a separate party under the supervision of the chief of the special survey, the position of these bases and meridians was to be definitely checked from time to time by means of a continuous triangulation to be carried on simultaneously over the most favourable belt of country that could be found for that purpose.

This triangulation was to be extended northerly from the 49th parallel, as fixed by the International Boundary Commission, and westerly from the Principal Meridian, in Manitoba, to the Mackenzie River near the outlet of Lake Athabasca.

This important survey was placed in charge of Lindsay Russell, Esq., Assistant Surveyor General, and early in the year a move towards initiating the work was made by ordering some of the instruments needed. Owing however to delay in receiving these the inception of the field work was somewhat delayed; however work was begun towards the end of July, and the following extract from the report of the Assistant Surveyor General upon the work accomplished this season will serve to show the beginning made in this important work:—

“Towards the end of July a portion of our instrumental outfit arrived at Ottawa, sufficient to enable me to instruct Mr. A. L. Russell, D.L.S., my first assistant, to commence the field work by connecting, by careful survey, the iron boundary at the intersection of the Principal or Winnipeg Meridian and the fourth base line, with the astronomic station at Pembina, whose longitude had been telegraphically determined.

“This he did in the following manner: Starting from the fourth base he made a check survey of the Winnipeg Meridian, with careful double chaining and repeated azimuthal observations throughout, down to the 49th parallel or international boundary.

“Thence he measured along that parallel eastward, by thrice chaining each mile, the distance between the Winnipeg Meridian and the astronomic station above-mentioned. Careful comparison of the steel chains used by him, with standard, was made at the end of every mile.

“On the 29th August, I left Ottawa with the remainder of the party, and sufficient instrumental outfit to do the principal part of the work of triangulation westward from Mr. A. L. Russell's point, the iron boundary before-mentioned.

“We were delayed on our journey to Manitoba by the necessity of going down the Red River by steamer, on account of our instruments, chronometers, base apparatus, &c., that could not go by stage waggon.

“These steamers are governed by circumstances as to time of sailing, and have not stated days of departure. We unfortunately arrived at such time as to lose altogether four days waiting for a steamer. This, with a slow passage down at low water, prevented our fairly getting to work at our base of triangulation until 18th September.

“A few days after this Mr. A. L. Russell and his division of the party joined me. Having completed the part of the survey already described, I instructed him to proceed westward to the vicinity of the White Mud River, there to carry on a section of the triangulation.

“The leveller, Mr. H. B. Smith, C.E., had hitherto—besides making some useful connections of the water levels below the rapids at St. Andrews on the Red River, the mouth of the Assiniboine, and the Red River at Pembina—been engaged in getting a profile along the lines surveyed by Mr. A. L. Russell.

“Considering that the country, over which our triangulation would for the rest of the current season extend, had been fully examined and levelled by the engineers of the Pacific Railway survey, I judged it desirable to turn our levelling party to more profitable account than that of verifying facts already well obtained. I therefore instructed him, instead of carrying his line of levels westward, in our track, to take them up the course of the River Assiniboine, and at the same time to make such observations of the nature of the stream, and the obstructions to its navigation, as would enable him to report upon its value for that purpose, and approximately the ameliorations it might require.

“I also directed him to make an examination, and obtain a profile between the River Assiniboine and the south end of Lake Manitoba, by the way of Long Lake, sounding the latter, and thence following the lowest intervening ground he could find, with a view to possible future connection by canal of the navigation of Lake Manitoba with that of the Assiniboine.

“Mr. Hermon, P.L.S., had, a previous season, reported to me that during the course of a survey in the vicinity he had seen the possibility of such a connection from the existence of ground of a low level throughout, between Long Lake and Lake Manitoba, exceedingly favourable to a canalling project.

“Mr. Hermon's judgment proved quite correct. Mr. Smith found a practicable line for the connection of navigation, and the relative level of the waters to be such as to admit of turning those of Lake Manitoba into the Assiniboine, to regulate its depth, and for the creation of water power, both objects of great importance in the locality concerned.

“Returning to the main occupation of the survey—the carrying of a series of triangles from the Winnipeg Meridian westward—this was continued by both sections of the party until winter had set in and the weather became sufficiently severe to interfere with accurate observation of the angles.

"On the 10th November, the work immediately under my own charge had reached Mr. A. L. Russell's section, and closed with it. I then moved the whole party down to the vicinity of Sturgeon Creek, and, availing myself of the finer days, ran the triangulation from the Winnipeg Meridian into Winnipeg, tying in its geographical position by stations on Fort Garry, St. John's Cathedral, and the iron township boundary in rear of the town.

"This closed our work of this nature for the winter, making the total distance covered by the survey, from the astronomic station at Pembina to the western termination of A. L. Russell's triangulation, and including that between the Meridian and Fort Garry, a hundred and sixty miles.

"Having received, on my return to Winnipeg, your telegraphic instructions that the force of the party was to be employed during winter, under direction of Mr. A. L. Russell, in laying out meridians and bases for townships east of the Lake of the Woods and along Rainy River, I proceeded to make the necessary arrangements for placing supplies in depots in these localities.

"This was effected with some difficulty; no one was passing over the Lake of the Woods road east of its first thirty miles; therefore the road had to be broken along it, and over the ice on the Lake of the Woods, the rest of the 150 miles that supplies were drawn. The absence of any forage the entire way was also unfavourable.

"Food for the party for the winter having been thus placed in the centre of their work, and having provided them with an outfit of camp equipage suited for the season—snow-shoes, dogs and dog sleds for transport—I despatched them on the 8th December to the Lake of the Woods, starting myself the same day on my return to Ottawa.

"Having thus given an outline of the manner in which the party was occupied in the field, I shall proceed to give some details of the method of survey, the processes and instruments employed.

"The 49th parallel of latitude, as established by the International Boundary Commission, being the datum line across the continent to which our system of bases and meridians has to be referred throughout, it was necessary that the present survey should be connected with some fixed point upon it.

"It was also requisite for the accurate laying down of the geographic position of important places and features of the country to be traversed, that the absolute longitude of the commencement of the survey should be obtained.

"For the purposes of the British section of the International Boundary Commission, and those of the Dominion Lands Surveys, in 1872, Capt. Anderson, R.E., Chief Astronomer to the British Commission, at Pembina, in co-operation with myself at Chicago, determined, by the electro-telegraphic method, the difference of longitude between the observatory at Chicago, and his astronomic station at the former place. This, with the known relative position of Chicago and Greenwich, will give, by reference to the Pembina station, the necessary connection of all our future surveys with Greenwich.

"Hence the adoption of the astronomic station on the 49th parallel at Pembina as the point of departure of the present survey.

"The accuracy of position, relatively to the 49th parallel, of our bases, can always be checked by carefully observed astronomical latitudes, therefore the actual measurement on meridians, northing and southing, does not require to be made with as minute precision as that along the bases in the east and west direction, on which no direct astronomic observation gives a check of any value.

"Until telegraph lines are constructed, throughout the country traversed, the accuracy of differences of longitude will depend solely on that of survey measurement.

"For this reason it was necessary to employ the method of triangulation in carrying the survey westward. On the check survey of the Winnipeg Meridian careful double chaining was deemed sufficient. The interval of ten miles between the meridian and Pembina station was not triangulated, the circumstances being so favourable to accurate chaining, and the distance so short, that thrice measurement by that means was considered sufficiently accurate; the probable error being in a small ratio to that of the absolute longitude of the point of reference.

"I have reason to believe, from the close inter-agreement of the different measures of each mile, that the longitude of the Winnipeg Meridian from the Pembina astronomic station is determined to a couple of feet, or as closely as measurement with the ordinary chain will admit. The evenness of ground—perfectly level prairie—was in the utmost degree favourable to accuracy.

"As the computation of the triangles and of the astronomic observations is yet in progress, I am unable to show for the whole of the work, by closing results, the comparative accuracy of the triangulation, but the following differences were obtained for the portion calculated.

"From the initial base, by a chain of twenty-eight triangles, whose sides would average about two miles, to the first base of verification, the length of the latter by calculation differed from that obtained by direct measurement an inch and a half, or as the base of verification was about 69 chains long, a closing error of about  $\frac{1}{30000}$ .

"The double measures of these bases with our base apparatus had compared as follows:—difference of first and second measurement of initial base, three-tenths of an inch.

"The azimuth of the base of verification mentioned, deduced from the initial base through one side of the above chain of triangles, differed from that obtained by the other side four seconds of arc. In the next series, of twenty-two triangles, the azimuths similarly carried forward from the beginning to a common side at the end of the chain differed a second and a quarter.

"In measuring horizontal angles on the prairies, the cause of error most beyond control, is that of unsteadiness of image produced by irregular refraction. This occurs to so great an extent as to produce frequently an apparent lateral displacement, of the station under observation, of many seconds.



"In such cases there is no other resource than to wait for more favourable atmospheric conditions. Hence a good deal of lost time in observing. For two or three weeks in the fall our progress was similarly hindered by large prairie fires in our vicinity, their smoke making it impossible to see any distance.

"It is a question whether the difficulty of lateral refraction might not be considerably lessened by observing from the top of a framed staging at a height of 20 or 30 feet from the ground. Some experiments shall be made at the outset of next season's work, to ascertain whether the advantage in this direction, and in the increased range of sight to be gained on prairie by very moderate elevation of the observer, would warrant the cost of transport of portable framework for the purpose.

"The station signals used are similar to jointed flagstaves, and are capped by bright tin cones, with brush below; they are stayed by three rope guys, an iron pin in the foot of the mast being stepped into the station mark, an oak post with central hole in head driven down till even with surface of the ground.

"The angles are taken with 10-inch theodolites, by which five seconds can be read. To obtain greater precision, by taking the mean of many observations, a number of series of direction readings is taken at each station.

"A series consists of the successive readings, from that on the station adopted as zero, round on each station concerned, through 360 degrees back to the zero station. The difference between the first and the last direction reading on this station being the closing error of that series.

"To eliminate the instrumental errors of collimation, inclination of horizontal to vertical axis, and to decrease those arising from errors in graduation and from play in clamps and tangent screws, these series are arranged as follows, premising by way of explanation:—

"That 'face right' and 'face left' are positions of the verniers and telescope axis differing 180 degrees, or a semi-revolution in azimuth.

"That 'forward motion' indicates that the instrument is revolved in azimuth with a motion from left to right, in the same direction as the hands of a watch.

"Backward motion the reverse.

"That for both motions, in bringing the observed object in coincidence with telescope wires, the tangent screw shall always be turned so that the motion shall continue onward in same direction.

"That positions 1, 2, 3 mean respectively, that the position of the fixed or graduated limb of the instrument is so shifted for each that if A be the line of graduation directed to the zero station in position 1, then will the lines A + 120, A + 240, comes successively opposite that station in positions 2 and 3.

"The arrangement is then —

"1st series, position 1, face right, forward motion.

"2nd do do do backward do

"3rd do do face left forward do

"4th do do do backward do

"And so on for each of the two other positions, giving twelve series in all, and for each position eight vernier readings; therefore, 24 for any one direction, and 48 for any angle.

"The azimuths of the sides of the triangles are checked at intervals by referring them to circumpolar stars, the method of observation being similar to that already stated for horizontal angles of the triangulation with the addition of noting level readings and chronometer times.

"A reference mark is used, consisting of a box about 9 inches cube, firmly mounted on a stand, and placed at such a distance as to be seen clearly through the telescope without altering its stellar focus. The fronting face of the box has in it a vertical slit of about a quarter of an inch opening; inside is a lamp, and between it and the slit is a ground or white painted glass pane, preventing irradiation and producing sharp definition of the edges of the slit to ensure precision when bisecting it with the telescope wire.

"The scheme for azimuthal observations stands thus :

#### " POSITION 1.

##### " FACE RIGHT.

" Forward motion, ——— mark, ———, level reading, circle reading.

" " " star, chronometer time, " "

" Backward motion, ——— star, " "

" " " mark, ———, " "

##### " FACE LEFT.

" Forward motion, ——— mark, ———, level reading, circle reading.

" " " star, chronometer time, " "

" Backward motion, ——— star, " "

" " " mark, ———, " "

"And so on for each of the other two positions.

"When taking the measures of a horizontal angle, the result of reversing the instrument, the inclination of its vertical axis being considered constant, is to reduce the angle to its projection on a plane passing through the instrument at right angles to its vertical axis of rotation, and there is a further correction to reduce it to its projection on the plane of the horizon. This is obtained by level readings.



"In prairie country the stations to be observed are usually so nearly on the same level that, with ordinary care in keeping the rotation axis of the instrument vertical, this correction is inappreciable. The level readings require to be noted only when stations differ much in elevation, and that there is risk of change of inclination, or when one of the objects is a star, as in the scheme for azimuthal observations above.

"These azimuths are also checked by comparison with a meridian mark established by observing transits of circumpolar and southern stars.

"To obtain the latitude of astronomic stations the following methods are employed :

"1st. Zenith distances of Polaris and other standard polar stars are observed in reversed positions of the altazimuth, with the chronometer times of observation ; also, an equal number of measures of circum-meridian zenith distances of standard southern stars, the mean of whose altitudes corresponds to that of the polar stars.

"2nd. The latitude is deduced from the observed interval of time between the east and west transits of stars across the prime vertical.

"3rd. Direct measurement, by means of a micrometer screw, of the differences of the meridian zenith distance of pairs of stars north and south of the zenith, Talcott's method.

"The special construction of the altazimuth used admitting of the equally careful application of all these methods, they become in a measure, from the difference of principle or procedure involved in each, independent checks on one another.

"Method No. 3 has the advantages over the others of rapidity of observation, simplicity of construction of instrument it requires, and freedom from the errors involved in graduation, or change of form of graduated circles ; but, in the present condition of star catalogues, has the drawback, that to comply with the restriction, of nearly equal altitudes of the north and south star in each pair—the cases of such coincidence occurring rarely among the fewer standard (best determined) stars, it is necessary to have recourse to the more numerous class, those whose positions are less accurately known.

"In the first method, by increasing the number of points at which the measuring circle is read, *i.e.*, the number of reading microscopes—and by being careful to select stars so that the averages of altitudes north and south shall not differ widely, the errors arising from undetected irregularities of graduation and from change of form can be rendered inappreciable. In this method, the condition of equality of altitude north and south is so modified that there is no difficulty in finding for any latitude suitable standard stars.

"The second method is of the three the least convenient of application in the field ; but is specially valuable as a check on either of the other two, on account of the, to some extent, independent data from which by it the latitude is deduced. It can be more successfully carried out in an observatory, where the stability of the instrument used can be better insured, where the small changes from fixity of position occur more slowly and are more uniformly proportionate to the intervals of time during which they take place. Satisfactory results can, however, be obtained in the field, with a properly constructed instrument, carefully placed and used in such wise as not to depend for too long an interval, without reference to stars, on its stability in azimuth.

"Common to all three methods, and entering directly in the results of all to its full amount, is any error arising from irregularity of action of levels, usually caused by alteration of curvature of the tubes due to their exposure, in course of observations, to changes of temperature. Attention to certain points in mounting them, and enveloping them, as much as their use will permit in non-conducting material, tend to prevent those rapid changes which have worst effect.

"For the first method, the following is the process of observation :—

"The altazimuth having been carefully adjusted and levelled, so that the outstanding instrumental deviations shall enter as exceedingly small factors, the telescope and vertical circle are firmly clamped at, approximately, the altitude of the polar star to be observed.

"The azimuthal motion is also clamped, and the star having been brought into a suitable position in the telescope field, the four circle microscopes are read and noted, also the three levels of the microscope bearer. A series of several measures is then made between the star and the middle fixed horizontal wire of the diaphragm, by means of the movable wire of the telescope micrometer, the chronometer time being noted with each measure ; then the readings of circle levels and microscopes are repeated in order the reverse of that at the first readings.

"The mean between the readings before observing and those last taken is the adopted circle reading, to which is referred each one of the intervening series of micrometric measures of the increments of zenith distance.

"The instrument is then reversed, and the same course pursued, with the difference that a double set of micrometric measures and three readings of microscopes and levels are made.

"Then the instrument is returned to original position and first series repeated, giving finally an equal number of zenith distances in the two positions—face right and face left.

"For the accurate interpolation of the changes of refraction throughout the observations, the thermometric temperature and height of barometer are read at beginning and end of each position. To eliminate the effect of errors in the adopted declinations or right ascensions of the circumpolar stars, the observations on them are repeated when they are at diametrically opposed points of their diurnal path.

"The southern stars are observed in a similar manner, near and on the meridian, in reversed positions of the instrument, with the slight difference that—the rapidity of their motion requiring change of azimuth of the telescope to keep them in its field of view during the series of micrometric

measures—it is necessary to read the levels at every measure to obviate the effect of any change of inclination that might be consequent on the movement in azimuth.

“The mean of the results, obtained by the foregoing method of observation of alternate northern and southern stars, gives a latitude free from the effects of flexure, or other constant known, or unknown, causes of error.

“For the application on this survey of the third or Talcott's method—which is similar to the first in principle, but different in the process involved—an additional very sensitive level is connected directly with the telescope of the altazimuth, somewhat in the manner of the level attached to the zenith telescope, which is the instrument usually employed in this method.

“The following is the course of the observations and their record: The telescope having been clamped at the mean of the meridian altitudes of the pair of stars to be observed, it is set in azimuth for the star which culminates first, as the star crosses the meridian it is, by an onward motion of the micrometer screw, bisected by the movable wire. The telescope level is instantly read and noted, and next the micrometer reading.

“The instrument is then turned 180 degrees in azimuth and same process repeated with the other star of the pair.

“As the instrument is very closely placed in the plane of the meridian, the chronometer time of bisection is noted only when the observer has failed to make it exactly at transit, and that it therefore requires reduction to the meridian.

“When the stars used have been observed a number of times at standard observatories, results from them, on account of the greater certainty of their declination, have more than usual weight; it then becomes worth while to repeat the micrometric measures on them, noting the chronometer times as in the method of circum-meridian zenith distances; but this seldom happens with the available pairs of stars, generally of lesser magnitude, among which class the fortuitous concurrence of equality of altitude and shortness of interval between transit of each, with certainty of position is rare.

“The second method, that of obtaining the latitude by observing the transit of stars across the east and west verticals, is carried out as follows:—

“From the catalogues are selected two groups of stars whose declinations are about a degree less than the latitude, and so disposed that the stars of each come closely one after another, and with such interval between the groups as will admit of their being observed in the following manner:—

“The meridian reading of the azimuth circle of the instrument having been checked by reference to the previously established meridian mark, its upper or movable part is clamped at the reading which places the central wire of its telescope in the plane of the prime vertical, then the chronometer times of the transits of the stars of the first group over the several wires are noted for their passage across the east vertical. The axis level is carefully read for each star—it remains on the axis during the course of the observations.

“Reference to the meridian mark is again made in case of any small azimuthal change of position of the stand. The instrument is reversed, the ends of the telescope axis being revolved through exactly 180 degrees of azimuth, and again clamped in the plane of the prime vertical, then the times of transit of the first group of stars over the west vertical are similarly recorded. This gives for that group of stars a series of observations in each of the positions—face north and face south—of the instrument.

“In this latter position the east transits of the second group of stars are observed, and then by reversal back to the original face north position, the west transits of the same group.

“This proceeding eliminates from the result of these observations any effect of collimation or wire interval.

“Meteorological observations were not made, for the reason that our outfit for that purpose was not complete at time of starting to the field; further it was not judged of any profit to make partial observations, as the work would lie for the short part of the current season comparatively near to one of the fully equipped government meteorological stations—connected with the Magnetic Observatory at Toronto—by which full returns would be made.”

The requirements of the survey made it necessary to have some base measuring apparatus that would occupy an intermediate position, in point of relative accuracy and time consumed in working, between the rapid but rough measurements of the ordinary chain, and the base apparatus usually employed in primary triangulations—which latter, although giving fine results, is complicated and requires much time in its application.

A special base measuring apparatus was designed by Mr. Russell for use on this survey. The following concise description of the apparatus is extracted from the Surveyor General's report:—

“Mr. Russell's apparatus consists of well seasoned deal rods successively connected with each other by metal fittings working on the contact principle, the particular application of which principle is as follows:—Each joint consists of an accurately turned hard metal cylinder with its axis horizontal and transverse to the line of measurement; on this cylinder, which is at the end of one rod, rests the rectangular inverted V, or claw of metal fitting, at the end of the next rod. The line bisecting the rectangular claw will always pass through the centre of the supporting cylinder at any relative



inclination of the two rods, the distances, therefore, from dot to dot at the centres of these cylinders, with the temperature not considered—are constant for all inclinations of the rods. The objectionable feature of any measuring apparatus working on the contact principle is that of wear of touching surfaces and consequent alteration of length. This is to a considerable degree obviated, in the present arrangement, by a provision for turning the cylinder round, at equal intervals of use, to distribute the wear and ensure, as nearly as possible, its occurring symmetrically. It is evident that the cylinder might be decreased in size until nearly cut through, and yet, if its section continued to be a true circle, the distance from central dot to central dot remain the same.

"Effects of temperature are approximately taken into account by adopting the mean of several standard coefficients of expansion for deal. It is hoped that circumstances may admit of employing the more correct method of determining experimentally the expansions for both temperature and humidity of the particular rods used, and applying corresponding corrections to measures made with them.

"In an interesting report on deal measuring rods lately written by the Warden of the Standards of England, he shows that experiments made with them in measuring an important base in the Ordnance Trigonometric Survey of Britain cannot be deemed so conclusive as was then thought against their use. That, in the case in question, their expansion from humidity was, in a distance of 5 miles, about 4 inches only, instead of about 2 feet as first deduced.

"In using these rods on the survey now in question, their length will be frequently checked by referring them to a standard steel bar by means of a micrometric comparator, having due regard to atmospheric conditions at time of making such comparisons.

"The results obtained during the last season by this apparatus are such as to justify the belief that one mile in a day, over reasonably level country, may be measured with remarkable accuracy.

"For instance, two bases were measured, one of 60 chains, the other, a base of verification, of 66 chains 25 links. The difference of a double measurement, in each case, was in the former, three-tenths, and in the latter, two-tenths of an inch."

#### SEASON OF 1875.

During this season thirty townships were subdivided, and 1,020 miles of block lines were run and marked. On this service twenty-one surveyors were employed, ten of whom were engaged on block surveys and the remaining eleven on township subdivision.

In addition to the ordinary land surveys, four surveyors were engaged in laying out Indian reserves at different points in Manitoba and the North-West Territories, and two in completing the surveys of the outer two-mile belt in parishes along the Red and Assiniboine Rivers.

Parts of the shore lines and adjacent islands of Lake Winnipeg and Lake of the Woods were surveyed, this work being performed in connection with the survey of timber limits.

The town plot called "Selkirk," situate on the east side of the Red River, at the crossing of the latter by the line of the Canadian Pacific Railway, and the town plot called "Alberton" on the Rainy River at Fort Frances, were laid out during this year.

#### THE SPECIAL SURVEY.

The work on this undertaking was somewhat retarded owing to the accident which befell the chief, Mr. Lindsay Russell, who sustained a compound fracture of the leg early in the season, and was in consequence unable to personally superintend the field operations.

In spite of this serious drawback, the work accomplished was of a satisfactory nature. The following extract from the report of the Assistant Surveyor General regarding the season's operations will illustrate the results secured :

#### "BLOCK SURVEY EAST OF THE LAKE OF THE WOODS.

"Between the block outlines in the Province of Manitoba, already run, and the Lake of the Woods, there was an interval of unsurveyed ground ; therefore, in projecting the meridians and bases east of that lake, to insure conformity of position with the existing surveys to westward, it was necessary to produce the 49th parallel, as established by the International Boundary Commission, across the lake, to serve as a tie and basis of projection for all blocks to the eastward.

"The course of the parallel crossed 30 to 40 miles of open lake. This, at a season of the year when the thermometer was sometimes registered there below 40°, entailed the expense of arrangements for dragging camping fuel, and further the inaccuracy that is likely to attend instrumental



work done under so unfavourable conditions of extreme exposure. It therefore seemed preferable to get the position of the parallel on the eastern shore by the more indirect method of a diagonal tie-line from the before-mentioned commission's point at the north-west angle, which line would traverse a part of the lake fairly sheltered by occasional wooded islands furnishing fuel.

"In the computation of the triangle this involved, the differences of latitude and longitude were calculated by that known as 'Gauss's second method,' and frequent and close azimuthal verification obtained for the tie-line which was twice measured; it is therefore presumed that the intersection of the 49th parallel with the eastern shore of the Lake of the Woods was established with very little if any less accuracy than by direct production of the line, the probable difference being only in the greater effect of any possible departure, in that region, of the figure of the earth from that assumed, and in the greater length of survey by the detour.

"The instruments for an astronomic check on the latitude were not in the field, even were they available the season would have made any dependence on their results precarious.

#### "TRIANGULATION FROM WESTBOURNE TO 102° MERIDIAN.

"From Westbourne to the Little Saskatchewan, the best route for the purpose that could be found is sufficiently wooded to impede very seriously a triangulation survey in a flat country. While in this section but slow progress was made.

"Westward of the Little Saskatchewan it became more open; the work advanced more rapidly, but still subject, though in a lesser degree, to the retarding difficulty that has existed throughout the survey of getting triangular points in a country of so even a surface.

"Lateral refraction was, as in the first season's work, a constant cause of loss of time, and injurious to precision. To it, principally, are to be attributed all the larger closing errors that appear in the reduction of the triangles, and the resulting differences between computed and measured lengths of sides.

"From the first or Winnipeg Meridian to that of the 102 west longitude, six bases were measured at as nearly equal intervals as circumstances permitted. The average difference between computed and measured bases of verification was a little less than  $\frac{1}{75000}$  of their length.

"The base-measuring apparatus proved this season, as last, fairly equal to the work expected of it. Though necessarily much inferior in precision to the more complex and delicate apparatus usually employed on extensive national trigonometric surveys, it can be used with greater rapidity and gives sufficiently accurate results for triangulation of second order; the average departure from mean of different measures of same distance being about  $\frac{1}{75000}$  of the length."

#### SEASON OF 1876.

The general depression in commercial affairs, and the consequent falling off in immigration, added to the grasshopper plague which had occurred in Manitoba during the previous three years, all had their effect upon the surveying operations, which during this season were on a somewhat limited scale.

Exclusive of the staff of the special survey, eighteen surveyors were employed. Their work was divided as follows:—Five were engaged on block surveys, six on township subdivision, five in surveying Indian reserves, one on settlement belt surveys and one on survey of main highway.

In his report for this year, the Surveyor General gives a statement regarding the total acreage of lands surveyed up to the end of this year's survey season, together with a statement of the cost per acre, and a comparison between this cost and that for Ontario and Quebec.

This statement is given here, being of considerable interest:

"Since the establishment of the Dominion Land Office, in March, 1871, to the date of this report, 10,574,915 acres have been surveyed into townships, sections and quarter sections, and 341,666 acres, comprising all the old settled parishes on the Red and Assiniboine Rivers, have been surveyed and mapped.

"To the above has to be added the work of the special survey—as also the laying out of many Indian reserves, a number of exploration surveys, and, finally, the subdivision of large tracts of timbered land into wood lots for settlers.

"It is proposed to give the acreage cost, to the present date, of the Dominion Land Surveys, in connection with which it will only be proper to mention the principal features of the system.

"The township surveys involve the preliminary steps of laying out the territory into blocks of twelve miles square, or four townships, enclosed between meridians and base or correction lines.

"The running out of these blocks is performed by day-work of a surveyor and party; and where subsequently deemed expedient, such blocks are divided into townships, which in turn are subdivided into sections and quarter sections—such subdivision being performed by contract at mileage rates previously approved by Order in Council.

"The cost of block outlines surveyed to the present time averages \$36.83 per mile.

"The cost per acre of subdividing the blocks of four townships into sections and quarter-sections has been 2.91 cents; adding the cost of the block lines to the above acreage rates makes the total cost of all the township lands surveyed to date to be 3.83 cents per acre.

"The survey of the settled lands in the parishes on the Red and Assiniboine Rivers has been more expensive, having cost  $27\frac{1}{10}$  cents per acre.

"This, however, cannot be considered an extravagant price, when it is remembered that an immense amount of work was involved in surveying and mapping the lands in the several parishes, showing all the holdings with the exactness required to admit of their being described in letters patent.

"Adding the expenditure for settlement belt surveys to that for subdividing township lands, we obtain the average cost for all farm lands surveyed to this date 4.57 cents per acre.

"Let us compare the township survey rates proper, *i. e.*, 3.83 cents, with the relative cost of township surveys in Quebec and Ontario.

"It may be premised that, previous to the union of Upper and Lower Canada, in 1841, the surveys in the respective provinces were performed with the ordinary surveyor's compass, the lines being run by the magnetic needle, and were, therefore, subject to gross errors, arising from the effect of local attraction upon the needle; also from surveyors not ascertaining the variation of the latter when making their surveys; and, further, no check lines were drawn in any of these surveys previous to the year 1829, the result of all which was that the lots of land were not of the form or area intended, the concession or ranges lines in some cases being so crooked as to reduce some of the lots to one-fourth of their intended area, and increase others proportionately, giving rise to subsequent endless law-suits and difficulties between owners of the adjoining lands.

"Further, surveys made by the magnetic needle did not involve the opening out of lines by cutting down trees, etc., and surveyors could therefore draw their lines much more rapidly than by the astronomical method, which requires all obstacles to be cleared.

"Since 1841 Crown Land surveys have been performed astronomically, and check lines have been run, thus ensuring accuracy in the form and area of the lots or sections.

"In stating the average cost per acre of the earlier Crown Land surveys in Upper and Lower Canada, the amount of work performed in surveying is not shown, so that the rate cannot fairly be compared with the present rates. In the former, only one boundary of the lot, the front, was surveyed; at present, all the four are drawn. Thus, in the old surveys the running of one mile of line gave 800 acres; now it gives only 160 acres.

"The average cost of the Crown Lands surveyed in Upper and Lower Canada from 1841 to 1875 was  $6\frac{4}{10}$  cents per acre, each mile bounding 200 acres.

"The Dominion Land township surveys, on the other hand, have been made for 3.83 cents per acre, each mile bounding only 160 acres."

#### SPECIAL SURVEY.

In accordance with the recommendation of the Assistant Surveyor General, the triangulation, which was being carried on by this survey, was stopped at the 2nd initial meridian, the intention being to establish the additional initial meridians by means of the electric telegraph line or by running standard meridians and parallels.

To effect these objects the following disposition of the force of the survey was made:—

Mr. A. L. Russell, D.L.S., in charge of the main section of the party, was instructed to proceed with the establishment of the meridians and parallels, and Mr. W. F. King, astronomical assistant, went to Battleford to co-operate with the chief at Winnipeg, in establishing the longitude by the interchange of telegraphic signals. However, the telegraph line between Fort Pelly and Winnipeg was never, throughout the summer, in sufficiently good order to admit of making through signals, and the attempt to establish the longitude of Battleford failed.

Mr. King devoted his time while waiting at Battleford to determining accurately the latitude of the place, and he also made a survey of the settlement and exploration of the district.

The main section of the survey was first engaged in connecting the 5th base and the 2nd initial meridian. The meridian was then measured and marked (it had been run the previous fall) for a distance of about 81 miles north of the 5th base.

Turning west from the initial meridian on the 8th base, the remainder of the season was spent in the survey of bases and meridians extending as far west as Fishing Lake. During the season about 180 miles of meridians and parallels were surveyed and marked, observations for latitude were taken at a number of points, and considerable exploration was also completed by the staff of the main section, and a very valuable report on the capabilities of a large portion of the country west and



south-west of Fort Pelly was submitted by Mr. A. L. Russell, in charge of this division of the survey.

#### SEASON OF 1877.

Comparatively few surveys were undertaken during this season, the surplus of township lands previously laid out having rendered any further immediate supply unnecessary.

Seventeen surveyors were engaged in field work, distributed as follows:—two in charge of divisions of the special survey; one in surveying roads; six in surveying Indian reserves; five on subdivision surveys; and three in settlement belt or "outer two miles" surveys.

The staff being small, only a limited amount of work was completed. Exclusive of the operations of the special survey and the parties engaged in road and settlement surveys, seven townships were subdivided and thirteen Indian reserves laid out.

Very satisfactory progress was made in the work of the special survey, as will be seen by the following description of the season's operations. The survey was divided into two sections, the eastern section being in charge of Mr. A. L. Russell, and the western section in charge of Mr. W. F. King.

The eastern section was engaged in extending the 102nd meridian (2nd initial meridian) northward to the located line of the Canadian Pacific Railway and telegraph line, the intention being to use this point when establishing the longitudes by means of telegraphic signals. They then produced a system of base and meridian lines as far west as the 106th meridian (the 3rd initial meridian), which was carefully established and produced 72 miles north to the North Saskatchewan River. A portion of the 12th correction line was then run east from the meridian, and some meridians and outlines in the vicinity of Prince Albert settlement, and of the Indian settlement on the South Branch of the Saskatchewan River, and some of the trails in the vicinity were explored and roughly traversed.

This section of the survey surveyed and marked about 300 miles of line during the season, and also effected considerable exploration in the vicinity of the line run. When on their way home in the fall, Mr. Russell, accompanied by an Indian, made a rapid trip through the Carrot River district, and was thus able to report regarding what proved to be an excellent district.

The western section of the survey proceeded to Edmonton, having while on the way established the latitude of certain points by astronomical observation. They also while en route provided for the guidance of future travellers by marking the crossings of the leading thoroughfares between Manitoba and Battleford by other important trails, with painted finger boards on posts erected at the several intersections in question.

The intention was that Mr. King should make a survey of the settlements in the vicinity of Edmonton, and should establish and survey the 114th or 5th initial meridian, in connection with which it was hoped to employ the telegraph line in interchanging signals as a means of determining the longitude. This, however, in common with all other attempts to make any use of this worse than useless telegraph line, proved a complete failure, and the initial meridian was established by Mr. King by using the longitude of Edmonton as determined by the Canadian Pacific Railway survey.

This section of the survey wintered at Edmonton, and during their stay there they completed the preliminary survey of several of the adjacent settlements. The results accomplished by this division are, however, more fully treated of further on.

Under amendments to the Geological Survey Act, the Survey became a branch of the Department of the Interior during this season, and the Museum was moved from Montreal to Ottawa.



## SEASON OF 1878.

In his report of this year the Surveyor General said, speaking of surveys:—

“In the Province of Manitoba and the territory adjoining, the large area that had been, in previous years, laid out in townships and subdivided, has, so far, met the principal needs of progressive occupation.

“But various settlements springing up in remoter parts of the North-West Territory, it has become necessary to provide for these by making detached surveys of townships and river frontage farm lots.

“The special survey of standard meridians and parallels has been prosecuted for some seasons past, with a view of affording that connection with existing surveys by which this could be effected, and of insuring that townships so laid out, in advance of the extension of the general system, in localities widely apart, and remote from the main body of surveyed Dominion Lands, should be found to have been correctly placed in the position they should occupy in that system when it is extended from Manitoba to British Columbia.

“The survey in question also embraces the determination of the latitudes and longitudes of points throughout the territory, for the purposes of contributing to its correct cartography and as a check on the measured surveys.

“The operations of the survey extend from the international boundary at West Lynne, on the Red River, following its valley and those of the Assiniboine and Saskatchewan Rivers, to a point about 15 miles west of Fort Edmonton, or nearly at the 115th meridian of west longitude from Greenwich, and approaching the base of the Rocky Mountains.

“Besides its purely surveying results, much information respecting the character of the country traversed has necessarily been obtained.”

Including the staff of the special survey, twenty surveyors in all were employed during this season.

In reference to work they were divided as follows:—

Four in charge of sections of special survey.

Nine in surveying Indian reserves.

Three in subdividing townships.

One surveying boundaries of Manitoba.

One surveying public highways in Manitoba.

One surveying parish of Ste. Agathe.

One acting inspector of surveys.

The subdivision surveys covered only ten townships, which were all situated in the vicinity of Prince Albert settlement.

The survey of part of the boundary of the Province of Manitoba was completed and properly marked.

Thirteen Indian reserves were laid out in Treaties 2, 3 and 4.

A large amount of important work was accomplished by the four sections of the special survey, a short résumé of which is here given.

Section 1 was, as it had been since the formation of the survey, under the charge of Mr. A. L. Russell, D.L.S. The greater part of the season's work consisted in preparing the way for subdivision surveys in the Prince Albert district, 133 miles of outlines being surveyed and marked. In addition to this considerable exploring was done by Mr. Russell in parts of the country which were as yet outside the surveys.

Section 2 of the survey, which was more properly called the astronomical section, was under the charge of Mr. W. F. King, D.T.S. This division had, as already described, proceeded during the previous season to Edmonton for the purpose of establishing the longitude in co-operation with Mr. Lindsay Russell by means of the telegraph line, and to fix the position of and survey the 114th or 5th initial meridian.

On the way to Edmonton during 1877, Mr. King determined the latitude at several points, and also placed painted finger boards at the following points:—

(1.) Near Shoal Lake (Mounted Police station), to indicate the trail to Fort Pelly and Swan River barracks.

(2.) On the north side of the Qu'Appelle River, beyond Fort Ellice, to show the trail to Fort Pelly.

(3.) On the Pheasant Plain, at the point where the trail from Port Pelly to Fort Qu'Appelle crosses the main trail.

- (4.) Near Touchwood Hills trading post, to mark the trail to Fort Qu'Appelle.
- (5.) At the "Forks of the trail" (Humbolt), where the trails separate going to the various ferries on the South Saskatchewan River.
- (6.) On Gabriel's trail at the telegraph line, at which point branches off a new trail crossing the south branch at the telegraph line crossing.
- (7.) On the hills west of Gabriel's, where two posts are planted, one to indicate the trail to Carlton, the other at the separation from the Battleford trail running south to the Cypress Hills.
- (8.) In the valley of Eagle Creek, at the junction of the plain and river trails to Battleford.

After reaching Edmonton a careful series of observations for latitude were taken, after which the 14th base line was established by producing a meridian north from the observation point to the latitude of the base, and from the latter point a system of chords was run to the west for about 13 miles, and the 114th or 5th initial meridian established; the longitude of Edmonton, as fixed by the Canadian Pacific Railway survey, being used in the determination of the position of this meridian.

A portion of the initial meridian was surveyed by Mr. King at this time.

This section of the survey remained in winter quarters at Edmonton until February, during which month a traverse of the Big Lake settlement was made. At the end of February, a further and last attempt was made to determine the longitude by interchanging telegraphic signals with Winnipeg or Fort Pelly, but the attempt, owing to the wretched condition of the telegraph line, was a failure.

From this date until May the party was engaged in exploratory and settlement surveys.

On the 25th of May the party started for home, but shortly after leaving Edmonton received instructions to return to Edmonton and complete the settlement surveys. After work in the Edmonton district was finished the party moved to Prince Albert, some members of the party proceeding down the river in a boat, and carrying the chronometers so as to effect a longitude tie with the 3rd initial meridian at Prince Albert.

The remainder of the season was spent in surveying outlines near Prince Albert, the party reaching Winnipeg on the return journey in November, having been absent 18 months.

The 3rd section of the survey was under the charge of Mr. J. S. Dennis, jun., D.T.S., and was employed in establishing the 4th initial meridian. This was accomplished by producing the 10th and 11th bases westward from the 3rd to the 4th initial meridians. In doing this the latitude post which had been previously established at Battleford by the astronomical section was tied in. The production of this line into Battleford proved that place to be in error in longitude, as shown by the Canadian Pacific Railway surveys, about eleven miles.

Section No. 4 of the survey was employed during the season under Mr. M. Aldous, D.T.S., in surveying the settlements of Prince Albert and St. Laurent.

In the fall of this year one of the first important changes regarding the administration of the surveys was made. In November the Surveyor General, Col. Dennis, was promoted to the position of Deputy Minister of the Interior, and Mr. Lindsay Russell, the Assistant Surveyor General, became Surveyor General.

#### SEASON OF 1879.

The surveying operations of the department were on a somewhat more extended scale during this season than they had been during the previous two or three years. Thirty-two surveyors were employed. Of these twenty were engaged in the survey of outlines and subdivision of townships. Nine were employed in surveying Indian reserves, and three in locating and surveying timber limits.

A very considerable amount of work was completed, 51 townships being subdivided, and 875 miles of outlines surveyed and marked.



During the season the 5th initial meridian was established by a section of the special survey, under charge of Mr. M. Aldous, D.T.S. He produced the 4th initial meridian north from the 11th base, the point where it had been established during the previous season, and then ran west on the 14th base and adjoining lines to the 5th initial meridian.

The astronomical section of the special survey was, as in past seasons, under the charge of Mr. W. F. King, D.T.S. The season was spent in moving from point to point, and establishing the latitude carefully by astronomical observation. In this way the following stations were established :

No. 7. Near the north-east corner of section 25, township 35, range 17, west of 2nd initial meridian.

No. 8. Near north-east corner of section 52, township 46, range 20, west of 2nd initial meridian.

No. 9. Near a post on the 10th base,  $58\frac{1}{2}$  sections west of the 3rd initial meridian.

No. 10. On the 11th base, near its intersection with the 4th initial meridian.

No. 11. On the 14th base, about 64 sections west of the 4th initial meridian.

These observations were taken for the purpose of furnishing a check on the line surveys then in progress, and corrections were from time to time made in positions of posts on the initial meridians and intermediate base lines, to make them agree with the latitudes astronomically determined.

Besides the determination of the latitudes at the above stations, the season's work included a number of micrometer and track surveys made for the purpose of better locating the main topographical features of the country. The results of many of these track surveys, where they were taken along the main trails, were scheduled, giving distances from point to point, and subsequently proved a great convenience to persons travelling on these trails.

The explorations which were carried on in addition to the general surveys added very much to the stock of information regarding the topographical and climatic features of the country, and each year's operations proved that previously held estimates of the quantity of arable land in many parts of the Territories were very much below the mark.

In fact it was only after the surveying operations had extended west to the Rocky Mountains, and north to the Saskatchewan River that the full extent of the large areas fit for cultivation and grazing was fully realized. These surveys and explorations exploded the idea, at that time so prevalent, that large portions of the Territories were barren wastes or deserts, and may be said to have settled the question of the adaptability of the larger part of the country as a field for successful farming operations.

In his report of this year the Surveyor General referred to proposed changes in the manner of surveying block outlines, and with the object of reducing, if possible, the average cost per acre of the survey of lands. It was suggested that the square to be surveyed by block surveyors should include sixteen townships, instead of four as had up to this time been the rule.

This proposal was sanctioned and preliminary steps were taken to carry it into effect during the next season. With this in view a memorandum was prepared setting forth in detail the modifications of the process of survey previously employed, necessary to effect the new system, and otherwise instructing surveyors as to the method to be pursued.

Attached to this memorandum was a series of geodetic tables, which were computed by Mr. W. F. King, and azimuth tables computed by the Surveyor General for use by surveyors engaged in surveying blocks under the new system.

These tables and memorandum, were subsequently incorporated in the new Manual of Surveys. This, however, will be referred to in its proper place.

#### SEASON OF 1880.

This season saw the largest number of surveyors employed that had up to this time been engaged in surveying operations during any one year.



Fifty-five surveyors completed 3,418 miles of Standard meridians, parallel and township outlines, and 11,220 miles of township subdivision.

This showing was an exceedingly creditable one, the season having been unfavourable for surveying operations on account of the continuous wet weather and bad condition of the roads.

Among the most important lines surveyed during this year was the 5th initial meridian, which was run south from Edmonton to Fort Macleod, a distance of some 350 miles. This line traversed the country along the easterly slope of the Rocky Mountains for a great portion of its length, and the survey furnished reliable information regarding a beautiful tract of country both for cultivation and grazing purposes, and one in which good soil was found to be prevalent, and wood and water abundant.

An important exploration was effected during this season by Professor John Macoun, who was sent to thoroughly examine the Souris River Valley and adjoining region to the west and north. The Professor made a very careful examination of a large portion of the country, and his report did a great deal towards correcting many erroneous ideas about the agricultural capabilities of that district, and also furnished valuable botanical and ornithological information.

During this year an important change was made in the department, the Indian Branch was created a separate department, and assumed control of the surveys of the Indian reserves in Manitoba and the North-West Territories, which had hitherto been carried on under the Surveyor General.

#### SEASON OF 1881.

The surveys of this season again show a considerable increase over those of the previous year, and consequently are in excess of any previous season's operations.

Seventy-three surveyors were engaged in carrying on work, and the large amount of 6,435 miles of Standard meridians and parallels and township outlines, and 16,865 miles of township subdivision lines, or a total of 23,300 miles of line were surveyed and marked.

Some important changes were made this year in the method of laying out Dominion Lands. Road allowances were, throughout, reduced from one chain and a-half to one chain, or sixty-six feet in width; and three of the east and west roads in a township done away with. The effect of this change was to transfer a very large area of land from road allowances into that of land available for purposes of sale and settlement, without detriment to facilities for communication, and also to reduce the cost of survey of a township to such an extent as to make a saving in the survey of the Territories of probably two and a-half millions of dollars.

Incidental changes and improvements in the method of survey were made, and a new edition of the Manual of Surveys became necessary; this was issued in March. It contained very full and detailed instructions to surveyors, and explanations regarding the change in the system, and also several useful tables which had been prepared by Mr. King and Mr. Deville.

In June of this season, Mr. E. Deville and Mr. W. F. King were appointed Inspectors of Surveys. Mr. A. H. Whitcher, who had been one of the inspectors of surveys up to this date, became Agent of Dominion lands at Winnipeg, and Mr. Milner Hart, the other inspector, retired.

The Surveys branch had been long and faithfully served by these two gentlemen, and much of the success in carrying on the field operations was due to their exertions and practical experience.

Although large settlements had by this time grown up in many parts of the Territories, and surveys in those localities were urgently needed, the rapid construction of the Canadian Pacific Railway through the Territories necessitated the employment of all available surveyors in surveying the country along the projected line of this road; however, the requirements of the outlying districts were not

altogether overlooked, and in the fall of this year large contracts were let for the subdivision of townships in the vicinity of Edmonton.

Arrangements were also made in the fall to employ two block survey parties, during the winter in producing the 5th and 6th initial meridians in the Peace River country. This portion of our territories having attracted considerable attention as a desirable field for immigration, it was desired to prepare for any subdivision surveys which might become necessary by having the initial meridians defined and marked on the ground.

During this season an exploration was made by Professor Macoun along the western slope of the Duck and Porcupine Mountains, and in the valley of the Red Deer River. This exploration afforded much valuable information regarding this hitherto almost unknown portion of the country.

In the early part of this season Mr. King was engaged in continuation of the work of the verification of the position of governing lines of the surveys, by astronomical observations. A table of the results of the observations which were taken with this end in view is given here.

In the latter portion of the season Mr. King, under his appointment as Inspector of Surveys, supervised the operations in the field of the survey force employed.

#### STANDARD SURVEY ASTRONOMICAL STATIONS.

When observed.	No.	Place.	Latitude.	Probable Error Latitude.	Longitude.
Aug., 1875.....	1	Near iron bar on 4th Correction line, 12 miles east of 1st Meridian.....	49 53 06.40		97 10 41.51
July, 1876.....	2	On 102 Meridian, near 5th base.....	50 22 21.85	0.38	102 00 00.00
Aug. & Sept., 1876	3	Battleford.....	52 42 38.69	0.21	108 16 59.02
Aug., 1877.....	4	On 106 Meridian, on Carlton trail.....	52 34 32.69	0.26	106 00 00.00
Sept. & Oct., 1877.	5	Fort Edmonton, on hill near fort.....	53 31 59.16	0.16	113 30 28.60
July, 1878.....	6	On river bank near Fort Pitt.....	53 34 05.28	0.19	109 47 10.00
July, 1879.....	7	North of Quill Lake.....	52 04 55.88	0.16	104 18 14.02
Aug., 1879.....	8	On 12th Correction line, near Carrot River.....	53 04 02.38	0.17	104 52 28.33
Aug., 1879.....	9	On 10th base, near Eagle Hill Creek.....	52 11 07.45	0.17	107 24 06.24
Aug. & Sept., 1879	10	Near corner 11th base and 110th Meridian.....	52 32 15.46	0.21	109 58 39.45
Sept., 1879.....	11	On 14th base west of the 110th Meridian.....	53 35 58.30	0.19	111 34 58.53
May, 1880.....	12	On 102nd Meridian on Ellice and Touchwood trail.....	50 42 29.74	0.09	101 59 56.77
June, 1880.....	13	At Swan River barracks.....	51 54 21.51	0.16	101 57 16.75
June, 1880.....	14	Near White Sand River north of Beaver Hills.....	51 38 40.70	0.26	103 07 57.58
July, 1880.....	15	Near Fort Qu'Appelle, in the valley.....	50 46 15.51	0.08	103 48 02.69
Aug., 1880.....	16	At Willow Creek, near Fort Macleod.....	49 45 20.64	0.21	113 24 00.04
Sept., 1880.....	17	On 114th Meridian, near Calgary.....	51 01 55.71	0.29	114 00 00.00
Oct., 1880.....	18	At Edmonton, in Valley.....	53 32 02.49	0.27	113 30 39.95
June, 1881.....	19	Near Touchwood Hills mission.....	51 18 31.27	0.25	104 15 35.17
July 1881.....	20	Qu'Appelle valley, near 106th Meridian.....	50 52 59.58	0.23	105 59 21.55
July & Aug., 1881.	21	Two miles north of Red Deer Forks.....	50 57 57.62	0.22	109 56 04.08

#### SEASON OF 1882.

Extensive preparations had been made for the prosecution of the surveys during this season, but the beginning of operations was very much delayed in the spring by the high water and floods in Manitoba, and the washouts on the Canadian Pacific Railway and American railroads.



Ninety-two surveyors were employed, divided into the three usual divisions of block, township outline, and contractors.

The work accomplished covered a very large area, the outlines of some 800 townships being surveyed, about 430 of which were subdivided into sections.

In May of this year Mr. Deville was appointed Chief Inspector of Surveys, and took charge of the Survey Branch of the Department. This change became necessary owing to the promotion of the Surveyor General, Mr. Lindsay Russell, who became Deputy Minister of the Department on the 1st of January, Colonel Dennis having been superannuated on account of ill-health.

In Colonel Dennis's retirement the department lost an officer who had been associated from their inception not only with the surveys but also with the land administration branch, and one who owing to his large professional experience and deep interest in all things pertaining to the welfare of Manitoba and the North-West Territories had devoted his best energies with very material results to the advancement of both.

Mr. King, the Inspector of Surveys, had charge of operations in the field, and during part of the season established his headquarters at the Forks of the Red Deer and South Saskatchewan Rivers.

Owing to the lack of wood in the western portion of the Territories, and the consequent difficulty in procuring wood posts, some other provision had to be made for marking the surveys. To meet this difficulty iron posts were substituted for the wooden posts for marking section corners. These were of half-inch gas pipe, 3 feet 8 inches in length, the numbers used to indicate the section, township and range, being stamped on a tin square placed on top of the post.

Before the opening of the season's operations in the field a large number of these posts had been manufactured in Montreal and shipped to Winnipeg and from there were distributed.

In consequence of the delays which had up to this time occurred owing to surveyors delaying in completing the subdivision of townships allotted them, and in preparing the returns of their surveys after the completion of the field work, two rules were adopted having in view the correction of these delays. The first was to give a bonus of 15 per cent to surveyors filing in the department before the end of the year the plans and field notes of the whole of their survey. The other was to require all contract surveyors to report at a certain date their presence in the field, and to allot the work of the missing ones among those on the ground.

These rules were found to work well, and their enforcement materially assisted in enabling the large amount of work accomplished this season to be successfully completed, and the results in the shape of complete township maps to be put into the hands of the land agents throughout the Territories.

In order to prepare the required copies of township plans for use by land agents and in the department, and in consequence of the large number of these plans required, it was found necessary during this year to establish a lithographic office in connection with the Surveys Branch of the department.

In view of the increasing population, and for greater convenience in regard to postal and other matters, an Order in Council was passed on the 8th of May of this year, dividing the North-West Territories into four provisional districts, called respectively Assiniboia, Saskatchewan, Alberta and Athabasca.

#### SEASON OF 1883.

The surveys of this season were conducted upon what may be termed a gigantic scale.

One hundred and nineteen surveyors were employed, classed as follows:—

Ten surveyors of base lines, twenty-one of township outlines, four examiners of contract surveys, eighty-two contractors for subdivision surveys, one settlement belt surveyor, one town plot surveyor.



This large number of surveyors, together with the necessary assistants, labourers, teamsters and cooks, comprised a small army of men, and required for transport a large number of horses, carts, buckboards, &c.

The extensive surveying operations during this and the previous season became necessary owing to the rapid construction of the Canadian Pacific Railway, which in the fall of this year reached the Rocky Mountains.

During this year 11,300 miles of township lines were surveyed, and some 1,221 townships were subdivided, involving the survey of some 70,000 miles of line. The results of the season's operations, which provided about 27,000,000 acres of land ready for the agriculturist, probably stand unrivalled in the history of land subdivision in any country.

The surveys covered the country between the Touchwood Hills and the Rocky Mountains, and extended north from the second base line to the North Saskatchewan River, and one of the immediate effects of the information derived from the actual survey of this immense district, was the proof of the fact that only a very small portion of the district was unsuited to settlement.

In the early part of this year it was found that the business of the Department of the Interior had become so extensive that the offices of Deputy Minister and Surveyor General, which had been combined in the person of Mr. Lindsay Russell, were separated. Mr. Russell retained the supervision of the technical branch as Surveyor General, and Mr. A. M. Burgess became Deputy Minister.

The supervision of the surveys at headquarters was under control of Mr. Deville, Chief Inspector of Surveys, while Mr. King, Inspector of Surveys, had the direction of the operations in the field.

Mr. King established his office at Medicine Hat, on the South Saskatchewan River, which proved a great convenience to surveyors, who were thus enabled to confer with an officer of the department, without the delay of correspondence with Ottawa, and this convenience was augmented by the continuance of a system which had been inaugurated during the previous season, of a corps of mail carriers, who visited the different parties in the field, distributing the mail and carrying despatches to and from headquarters.

In May a third edition of the Manual of Surveys was issued, which contained very full instructions to Dominion Land Surveyors regarding all operations to be performed by them, and also many valuable tables to assist them in their work.

#### SEASON OF 1884.

The large area which had been surveyed and made available for settlement by the operations of the seasons of 1882 and 1883 was now found to be fully equal to the immediate requirements, and it was considered advisable to curtail operations in the field, as experience had shown that the posts and mounds in unsettled districts are from various causes obliterated, and in some cases the resurvey of the townships had been found necessary.

The surveys of this season were conducted chiefly in the districts between Carlton and Fort Pitt, between Edmonton and Calgary, and in the vicinity of Fort Walsh, about 300 townships in all being subdivided.

Seventy-one surveyors were employed, of whom forty-eight were engaged on subdivision surveys, thirteen in surveying township outlines, two in examining contract surveys, and the remaining eight on miscellaneous surveys at different points.

Among the surveys, other than those having in view the subdivision of land into agricultural holdings, which had from time to time been undertaken by the department, may be mentioned the survey of the old trails or roads, which was begun this season, the intention being to continue the survey from time to time of the important trails in the Territories.

These trails were surveyed and permanently located at the request of the Lieutenant Governor of the North-West Territories, and in accordance with the provisions of the North-West Territories Act.

A complete schedule of the trails which have been surveyed in the Territories, and also those surveyed in Manitoba, will be found in the appendix.

During the season of 1883 the township lines had reached the Peace River district, but owing to the distance from the main line of communication, the survey of these lines proved so expensive that they were discontinued, and exploratory surveys were undertaken for the purpose of obtaining general information regarding that country. With that end in view an exploration with micrometer traverse was made during this season of the Peace and Athabasca Rivers, and also of the Saskatchewan and Nelson Rivers from Prince Albert to York Factory.

A complete schedule of the exploratory and micrometer surveys performed by the department during the period treated of in this history will be found in the appendix.

The passage of the Settlement Act by the Legislature of British Columbia, and the transfer under its provisions to the Dominion Government of a belt of land 20 miles in depth on both sides of the Canadian Pacific Railway through that province, necessitated the opening of an office in Victoria, B.C., for the disposal of the land thus acquired, and also the initiation of the survey of the lands within the belt.

These surveys were begun in the vicinity of Port Moody and St. Mary's Mission, two surveyors being employed in subdivision surveys at these points; and two others were occupied in determining and laying down, as a general base for the surveys, the line of the Canadian Pacific Railway from Port Moody eastward.

The Dominion Lands surveys in British Columbia, and the amendments to the system in force in Manitoba and the North-West Territories, rendered necessary in order to make the system applicable to that mountainous country, are more fully treated of further on.

On the 30th of June of this year, Mr. Lindsay Russell, the Surveyor General, retired from the service on account of failing health.

In Mr. Russell's retirement the department lost a gentleman whose great abilities and professional skill were universally recognized, and the Dominion Land Surveyors lost a chief who was ever ready to assist by advice and encouragement all efforts towards improvement in methods and knowledge.

Mr. Russell had been associated with the Dominion Lands surveys almost from their inception, and his knowledge and indefatigable exertions very materially assisted in the successful prosecution of the surveys, and in developing their scientific and exact character.

#### SEASON OF 1885.

The surveys of this season were on a very limited scale when compared with those of the two previous years.

The proposed operations were somewhat interfered with by the troubles which occurred in the northern part of the Territories in the spring of the year, but in any case the surveying operations would probably have been limited, as the requirements of immigrants and the demand for subdivision surveys had been very fully provided for by the extensive surveys effected during the previous three years.

Thirteen surveyors only were employed, who were allotted work as follows:—

Two astronomers, one surveyor of railway line in British Columbia, one subdivider in British Columbia, one surveyor of trails, one explorer, three surveyors of town plots, and four subdivision contractors.

The two astronomers, Messrs. O. J. Klotz and Thos. Drummond, Dominion Topographical Surveyors, were engaged during the season in the important work of determining by means of the interchange of telegraphic signals, the longitudes of several points along the line of the Canadian Pacific Railway in British Columbia, and also the latitudes of these points by astronomical observation. These points were to be used for the purpose of fixing the positions of the initial meridians of the railway belt. At the same time Mr. Wm. Ogilvie was engaged in making a survey of the railway line to be used as a base for the future subdivision surveys at points along the line.



It may be well to refer here, briefly, to the system adopted for the survey of the lands within the railway belt, and the proposed method of making the surveys on the ground.

Owing to the mountainous nature of the railway belt it was seen that the system in force in the Territories required some amendments to make it applicable to this district. The chief amendment adopted was in reference to the road allowances, which instead of being provided on certain lines, as in the general system, were provided for by an allowance being made in the acreage of each section.

It would be an impossible undertaking to try and follow the usual method of projecting base lines and township outlines in a mountainous country, therefore some other base for survey operations throughout the belt had to be provided, and as the road-bed of the Canadian Pacific Railway afforded an easy route for a survey, an accurate instrumental traverse along this line was adopted, as a most convenient and accurate method of establishing points of reference, from which the surveys at different points throughout the belt could be started. The portion of this traverse between Port Moody and Revelstoke was completed by Mr. Ogilvie during this season as above mentioned.

The methods followed in effecting this traverse, and in putting the results in such shape as to be ready for reference in carrying on dependent surveys are very interesting; but any description of them would be out of place here: both subjects will be found ably treated of in section II of this report.

In the latter half of this season, Mr. Thos. Fawcett, D.T.S., made an exploratory survey from the Lake of the Woods to Cat Lake, *via* the English, Albany and Cat Lake Rivers, and his report furnished much valuable information regarding this portion of unsurveyed territory.

In consequence of the retirement of Mr. Lindsay Russell, already referred to, the position of Surveyor General became vacant. This vacancy was filled in March, by the promotion of Mr. Deville, the Chief Inspector of Surveys.

In the fall Mr. Dennis was appointed to carry on the work of making the necessary corrections to existing surveys, resulting from errors which had been made at certain points. The work done in this connection will be found more fully treated of further on.

#### SEASON OF 1886.

Forty-three surveyors were employed during this season. They were divided as follows:—

Two astronomers, one topographer, one surveyor at Banff Hot Springs, three subdividers in British Columbia, two subdividers in the North-West Territories, four surveyors correcting old surveys and examining contract surveys, twenty subdivision contractors, and nine surveyors of trails.

The astronomers, Messrs Klotz and Ogilvie, were engaged in the continuation of the work of determining the latitudes and longitudes of various points along the line of the Canadian Pacific Railway, and in the North-West Territories. In addition to this work, Mr. Klotz completed the traverse of the railway line from Revelstoke to the summit of the Rocky Mountains, which as already explained was to be used as a base for the extension of the Dominion Lands system of survey in British Columbia.

Mr. D. L. S. McArthur, this season, commenced the work of laying down the topography of the country on both sides of the railway line through British Columbia. He mapped the country between Canmore and Revelstoke, but was much delayed in his operations owing to dense smoke caused by forest fires. This work involved very hard labour and considerable danger in climbing to the top of the high mountain peaks.

A large number of the old trails in Manitoba and the Territories were surveyed during this year, nine parties being employed on that work. These trails were defined and marked under the provisions of the North-West Territories Act, and



many difficulties arose in surveying them, owing to the settlers having fenced up the original trails; these difficulties were however settled by reference to the Lieutenant Governor of the Territories.

The only other surveys out of the ordinary run of season's operations carried on during this year was a micrometer traverse of the shores of Lake Winnipeg by Mr. Wilkins, D.T.S.; the commencement of the topographical surveys at Banff Hot Springs, by Mr. G. A. Stewart, D.L.S.; and the initiation of the work of effecting corrections where required to existing surveys.

An attempt was made during this year to introduce photography on the surveys, a number of surveyors being supplied with cameras. It was proposed to illustrate surveyors' reports by reproducing their photographic views, and it was desired to test the usefulness of photographs in providing topographical information.

In July of this year, Mr. W. F. King, Inspector of Surveys, was promoted to the position of Chief Inspector, rendered vacant by the promotion of Mr. Deville.

As it had been found that in the grazing districts of the Territories, the cattle and horses destroyed the marks of the surveys, by knocking down the posts and tearing down the mounds by pawing, it was decided during this season to try and prevent the obliteration of the marks of the surveys in these districts, by dispensing with the mounds, and using a large iron post firmly driven into the ground, four pits being dug as usual, but the earth from these being scattered about instead of being made into a mound.

#### SEASON OF 1887.

Compared with the previous year there was a decrease in the surveying operations during this season.

Thirty-nine surveyors in all were employed, and the work effected was as follows:—

The determination of the latitudes and longitudes of certain points was carried on under the charge of Mr. W. F. King, Chief Inspector of Surveys, Mr. O. J. Klotz, D.T.S., being associated with Mr. King in this important work. During the season the position of Wapella, Kalmar and Port Arthur were accurately fixed.

In British Columbia five parties were engaged in subdivision surveys, the work performed being in the New Westminster, Kamloops, Thompson River, Little Shuswap Lake and Spellumcheen districts, and Mr. Dominion Land Surveyor Belanger was employed in planting section and quarter section posts in the vicinity of the railway line from the summit of the Rocky Mountains westward.

Mr. J. J. McArthur and Mr. W. S. Drewry continued the topographical surveys in the vicinity of the railway line. This work was carried on under a somewhat different system from that in vogue up to this time. The surveyors were provided, in addition to the ordinary surveying instruments, with small cameras with which views were taken from different points, the positions of which were fixed by rough triangulation; in mapping the district explored, the topographical details are supplied from the photographs.

This "photo-topographical" system of surveying was found to give good results, and allowed of large districts, which owing to their mountainous nature could not be surveyed by ordinary methods, being accurately mapped at a very small cost.

The development, enlargement, &c., of the large number of photographs taken in connection with these photo-topographical surveys, necessitated the employment of a professional photographer at headquarters, which position was filled in April of this year by the appointment of Mr. H. N. Topley.

Seven surveyors were engaged during the season, under the direction of Mr. Dennis, who, on the 7th of May, had been appointed Inspector of Surveys, in effecting corrections to existing surveys at different points in the Territories, and in examining subdivision contracts.

Ten contracts were let for subdivision surveys. This number, though small, provided for all immediate wants, as the subdivision surveys were found to be well in advance of settlement.

Until the previous year that part of the North-West Territories adjoining Alaska had not been visited by any parties under instructions from the Government, and the information regarding that vast district, derived as it was from travellers or foreign sources, was necessarily very vague.

During this year it was decided to send a joint geological and surveying expedition to make an examination of its resources. The expedition was in charge of Dr. Dawson, Assistant Director of the Geological Survey, with whom was associated Mr. W. Ogilvie, D.L.S., who, under instructions from the Surveyor General, was entrusted with the work of surveying the Pelly and Yukon Rivers, and defining the point where the 141st meridian (the international boundary between Alaska and Canada) intersected that river.

Mr. Ogilvie was instructed to winter at the boundary line, in order to complete the necessary astronomical observations at that point, and in the spring of 1888 was to start for the mouth of the Mackenzie River, by way of Porcupine River and Fort McPherson, and then ascend the Mackenzie River to Fort Chipewyan, at which place he would connect with his exploratory survey of the Peace and Athabasca Rivers, performed as already mentioned in 1884.

In June Mr. Ogilvie reached Chilkoot Inlet, in Alaska, and commenced his survey at one of the United States coast survey stations. He then crossed Taiya Pass, a distance of 18 miles, to Lake Lyndeman, the head of the Lewes River, and from there carried his survey down stream to the international boundary line.

This was much the most important and extensive exploration which had up to this time been undertaken by the department, and the results were looked forward to with a great deal of interest.

During this season Mr. Dominion Land Surveyor St. Cyr was engaged in defining the boundaries of the Rocky Mountains Park at Banff. Mr. Dominion Land Surveyor Miles located and surveyed reserves for the Mounted Police at different points in the Territories; and Mr. Dominion Land Surveyor Wilkins was detailed to survey certain lands occupied by the Methodist Church Missionary Society, adjoining or inside the boundaries of Indian reserves.

#### SEASON OF 1888.

The operations during this year, both in number of surveyors employed and work undertaken, shows a decrease as compared with 1887.

Thirty-five surveyors were employed, being distributed as follows:—

#### ASTRONOMICAL WORK.

The determination of the latitudes and longitudes was continued under the direction of Mr. King, Chief Inspector of Surveys, assisted as formerly by Mr. Klotz. During the winter a large astronomical transit and sidereal clock, with electric attachment, both by the well known makers Messrs. Cook & Sons, had been procured, and in the spring these instruments were set up in Winnipeg where Mr. King was located. Mr. Klotz during the summer occupied stations at Edmonton and Fort Pitt.

#### EXPLORATIONS.

Mr. Ogilvie continued his exploratory expedition in the Mackenzie district.

In the early spring he crossed over from his winter quarters on the Yukon to the Mackenzie River by way of the Porcupine, and from Fort McPherson began his survey of the Mackenzie. By the fall he had reached Fort Simpson.

An exploratory party under charge of Mr. D. T. S. Fawcett started in May from Athabasca Landing for the mouth of the Clearwater River, the object being to



connect the surveys of the Athabasca and Nelson Rivers by a survey down the Churchill River.

Mr. Fawcett was unable to reach the Nelson River. He finally reached the Saskatchewan by way of Cumberland, and descended that stream to Grand Rapids, and then by way of Lake Winnipeg to Winnipeg.

#### CORRECTION SURVEYS.

Five parties, under the direction of the Inspector of Surveys, were engaged during this season in carrying on correction surveys, among the most important of which may be mentioned the resurvey of the greater portion of the 5th initial meridian and part of the 4th initial meridian by Mr. D. L. S. Belanger.

#### BRITISH COLUMBIA.

In British Columbia the work of re-establishing the reference marks of the traverse of the Canadian Pacific Railway, and the marking of the nearest section and quarter section corners, was completed by Messrs. Fawcett, Dufresne, Garden and Cotton.

Mr. McLatchie and party were employed in effecting subdivision surveys in the valley of the Spillumcheen River, which is one of the best agricultural districts in that province.

Various subdivision surveys and resurveys were made by Mr. Cotton in the New Westminster District, and he also, by means of a traverse survey, established the limit of the railway belt on Pitt and Slave Lakes.

Mr. St. Cyr, who in the early part of the season completed the survey of the limits of the Rocky Mountain Park, and also some minor surveys in the Bow Pass, spent the latter part of the season in effecting a survey of the Columbia River for the purpose of defining the southern limit of the railway belt.

#### MANITOBA AND NORTH-WEST TERRITORIES.

Fourteen contracts were let for subdivision surveys in Manitoba and the Territories during this season, the larger number of the townships subdivided being north-east of Calgary.

Mr. Lestock Reid was engaged in surveying the Carrot River trail in the Prince Albert district, and also a main trail on the south side of the Saskatchenawan River.

Mr. John Bourgeois made a survey of the trail from Carlton to Green Lake.

Mr. Green completed the survey of the more important trails in the Calgary district, and also effected the resubdivision of some townships in Southern Manitoba.

The highway from Westbourne to Gladstone, along the line of the Manitoba and North-Western Railway, was surveyed by Mr. C. P. Brown.

#### TOPOGRAPHICAL SURVEYS.

The "photo-topographical" survey of the Rocky Mountains was continued by Messrs. McArthur and Drewry, the former working in the Bow Pass from Copper Mountain eastward, and the latter being engaged in the Crow's Nest Pass.

The methods and instruments were considerably improved during this season, and a large tract of country was accurately surveyed.

#### NOTE.

In the foregoing history of the surveys performed under the Dominion Lands system an attempt has been made to consolidate the information relating thereto, which is now only to be found by reference to annual reports of the department, or to documents on record in the department. It will be understood that at best this narrative is only a compilation of information in a connected manner, so as to be



useful for reference by those engaged in or interested in the survey operations of the department.

To refer briefly to some points connected with these surveys, and to the benefits which have accrued from their prosecution, may not be out of place.

When the vast country, now known as Manitoba and the North-West Territories, was acquired by the Dominion, the information possessed regarding its topography, soil and climatic conditions was very vague. It is true the greater portion of it had been explored by the hardy pioneers connected with the Hudson's Bay and North-West Fur Companies, and exploratory surveys had been made by Captain Palliser and others, which afforded much valuable information; but in so far as reliable data or statistics, of use in inducing immigration, were concerned, the Government practically knew nothing.

The primary consideration, having in view the future welfare of the country, was to devise a system under which the country could be rapidly and accurately subdivided into farm holdings. The system adopted and the manner of carrying it into effect have been treated of in the preceding pages.

The prosecution of these surveys has resulted not only in the subdivision of the country in a thorough and accurate manner, but also in the acquirement of a mass of reliable information which has enabled us to affirm that in Manitoba and the North-West Territories, the Dominion possesses an heritage which, for healthy climate, richness of soil and general adaptability for agricultural pursuits, compares favourably with any country on the habitable globe.

The manner in which the surveys have been performed, both as regards the quantity of work done and the accuracy of results accomplished, reflects the greatest credit upon those connected with the administration of the survey operations; and we are able to boast that never in the history of any country has so large a quantity of work been so successfully accomplished in the same space of time, and further that our land subdivision surveys, under the Dominion Lands system, stand unrivalled for accuracy and permanency of marking.

In the appendix will be found a schedule for each season, giving the names and residences of the surveyors employed, the character of the work upon which each one was engaged, and details of the work completed.

Schedules showing the trails surveyed, the reserves surveyed for the Hudson's Bay Company, Indian reserves surveyed by the Department of the Interior, micro-meter and exploratory surveys performed, correction or resurveys completed, the acreage of the yearly surveys, and all settlement, townplot and miscellaneous surveys effected, are also appended.

## APPENDIX.

## SCHEDULES.

SCHEDULE (No. 1) showing Surveyors employed and work performed by each, during the year 1869.

Name.	Residence.	Description of Work performed.
Dennis, Lt.-Col. J. S., P.L.S.	Toronto, Ont .....	Superintendence and direction of surveys.
Hart, Milner, P. L.S.	St. Mary's, Ont...	Survey of part of Winnipeg Meridian and of outlines east of the same.
Webb, A. C .....	Brighton, Ont ....	Survey of part of Winnipeg Meridian and of outlines east and west of same: also settlement survey on north side of the Assiniboine River.

SCHEDULE (No. 2) showing Surveyors employed and work performed by each, during the year 1871.

Beatty, W .....	Delta, Ont .....	South boundary Township 3, Ranges 1 to 14, inclusive. North do do 4 do 1 to 14 do North do do 6 do 1 to 8 do East do Townships 3 and 4, Range 13. East do do 3 and 4 do 11. East do do 3, 4 and 5, Range 9. East do do 3, 4, 5 and 6, Range 7. East do do 3, 4, 5 and 6, Ranges 3 and 5. East do do 3 and 4, Range 15. (All west of the Principal Meridian.)
Brabazon, S. L ...	Portage du Fort, Que.	Sub-division of Townships 11 and 12, Range 2. East boundary do 11 and 12, Range 5. North do Township 11, Range 5. (All east of the Principal Meridian.)
Beaudry, J. H. ....		Part of the parishes of St. Vital and St. Norbert.
Doupe, Jos. ....	Angus, Ont. ....	South boundary Township 7, Range 1 to 6, inclusive. North do do 8 do 1 to 6 do North do do 10 do 1 to 4 do East do Townships 7, 8, 9 and 10, Range 3. East do do 7 and 8, Range 5. (All west of the Principal Meridian.)
D'Auteuil, L. J. ....		Traverse Red River, Dean's Farm to Pembina.
Doucet, G. A. ....		Traverse of part of Red River.
Hart, Milner .....	St. Mary's, Ont...	Principal Meridian, Townships 1 to 16, inclusive. East boundary Townships 15, 16 and 17, Range 3. Part east boundary Township 17, Range 5. Part east do do 15 do 5. East do Townships 12 and 13, Range 7. East do do 12, 13 and 14, Range 9. East do Township 15, Range 11. Part north do do 17 do 4. North do do 16 do 1 to 4, inclusive. South do do 15 do 1 to 5 do South do do 15 do 9 to 12 do (All west of the Principal Meridian.)

SCHEDULE (No. 2) showing Surveyors employed and work performed by each, during the year 1871—*Continued.*

Name.	Residence.	Description of Work performed.
Hermon, R. W....	Listowel, Ont. ....	North boundary Township 13, Range 6. East do Townships 12 and 13, Range 6. Sub-division do 12 and 13 do 6. do Township 12, Range 5. do south $\frac{1}{2}$ Township 13, Range 5. (All west of the Principal Meridian.) North boundary Township 11, Ranges 1 and 2. East do Townships 11 and 12, Ranges 1 and 2. Sub-division do 11 and 12 do 3. (All east of the Principal Meridian.)
Johnston, J. ..	Hull, Que.....	North boundary Township 8, Ranges 1 to 8, inclusive. North do do 10 do 3 to 4 do East do Townships 7, 8, 9 and 10, Ranges 2 and 4, inclusive East do do 9 and 10, Range 6. East do do 11 and 12 do 4. (All east of the Principal Meridian.)
Kennedy, L .....	Toronto, Ont. ....	South boundary Township 3, Ranges 1 to 4 inclusive. North do do 4, do 1 to 6 do North do do 6, do 1 to 6 do East do Townships 3, 4, 5 and 6, Ranges 2 and 4. East do do 5 and 6, Range 6. (All east of the Principal Meridian.)
Magrath, B. ....	Aylmer, Que. ....	North boundary Township 12, Ranges 1 to 6 inclusive. North do do 14, do 4 and 6. East do Townships 13 and 14, Ranges 4 and 6. Part of east boundary Township 13, Range 2. (All east of the Principal Meridian.)
McLatchie, John .	Templeton, Que. . .	Sub-division Township 12, Range 7. Part do do 14, do 9. West boundary do 12, do 7. South do do 12, do 7. East do do 13, do 8. (All west of the Principal Meridian.) Sub-division south $\frac{1}{2}$ Township 10, Ranges 1 and 2. North boundary 9, Ranges 1 to 4 inclusive. East do 9 and 10, Ranges 1 and 3. Part of eastern boundary of 10, Range 2. (All east of the 1st Meridian.)
McPhillips, Geo., sen.	Winnipeg, Man. . .	Survey of St. François-Xavier, Baie St. Paul and Headingly.
McFadden, M. . . .	Newry, Ont. ....	Along settlements.
Staunton, F. H. L.	Dundas, Ont. ....	North and east boundaries Township 13, Range 10. East boundary Township 14, Range 10. Part of sub-division of Township 14, Range 10. (All west of the Principal Meridian.) Sub-division of Townships 9 and 10, Ranges 3 and 4. (All east of the Principal Meridian.)
Sinclair, Donald .	Winnipeg, Man. . .	Sub-division of Townships 13 and 14, Range 7. do Township 14, Range 8. North boundary do 13, Ranges 7 and 8. (All west of the Principal Meridian.) Sub-division of Township 11, Range 3. do Townships 11 and 12, Range 4. North boundary of Township 11, Ranges 3 and 4. East do Townships 11 and 12, Range 3. (All east of the Principal Meridian.)
Sadler, David .....	Dalhousie, N.B. . .	Sub-division of Township 9, Ranges 1 and 2. East boundary do 9, Range 3. (All east of the Principal Meridian.)
Wagner, William .	Toronto, Ont. ....	Sub-division Township 13, Range 8, west of the Principal Meridian. Sub-division Township 12, Range 8. do do 13 do 9. South boundary do 12 do 8. North do do 13 do 9. (All west of the Principal Meridian.) Sub-division Townships 11 and 12, Range 1, east of the Principal Meridian.



SCHEDULE (No. 2) showing Surveyors employed and work performed by each, during the year 1871—*Concluded.*

Name.	Residence.	Description of Work performed.
Webb, A.C. ....	Brighton, Ont. ....	North boundary Township 12, Ranges 1 to 10 inclusive. North do do 14 do 1 to 5 do North do do 14 do 9 to 12 do East do Townships 11, 12, 13 and 14, Range 3. East do do 13 and 14, Range 5. East do do 13 and 14 do 11. (All west of the Principal Meridian.)
Sinclair, Duncan ..	Ottawa, Ont. ....	Survey part of the parishes of St. John, Kildonan and St. Paul.

SCHEDULE (No. 3) showing Surveyors employed and work performed by each, during the year 1872.

Bray, Edgar ....	Oakville, Ont. ....	Sub-division of Townships 9 and 10, Range 5. North boundary Township 9, Range 5. East do Townships 9 and 10, Range 6. (All west of the Principal Meridian.) North boundary Township 10, Ranges 5, 6, 7 and 8. South do do 11 do 5, 6, 7 and 8. North do do 12 do 7, 8 and 9. East do Townships 11 and 12, Ranges 6 and 8. (All east of the Principal Meridian.)
Beatty, W. ....	Delta, Ont. ....	North boundary Township 6, Ranges 9 to 14 inclusive. East do do 6, Range 9. East do Townships 5 and 6, Range 11. East do do 5 and 6 do 13. East do do 5 and 6 do 15. (All west of the Principal Meridian.)
Beatty, W. & D. . .	do . . . . .	Sub-division of Township 2, Ranges 1 to 14 inclusive. do do 5 do 3 and 4. do do 5 do 11, 12, 13 and 14. do do 6 do 3, 4, 11, 12, 13 and 14. North boundary Township 1, Ranges 1 to 14 inclusive. North do do 2 do 1 to 14 do North do do 5 do 3, 4, 11, 12, 13 and 14. East do do 2 do 2 to 15 inclusive. East do do 5 do 4, 12 and 14. East do do 6 do 4, 12 and 14. (All west of the Principal Meridian.)
Brown, C. P. ....	Fredericton, N.B. .	Sub-division of Township 15, Ranges 11 and 12. do do 16 do 11 and 12. East boundary Townships 15 and 16, Range 12. North do Township 15, Ranges 11 and 12. (All west of the Principal Meridian.)
Burke, W. ....	Cobourg, Ont. ....	Sub-division of Township 3, Ranges 3 and 4. do do 4 do 3 and 4. North boundary of Township 3, Ranges 3 and 4. East do do 3 and 4, Range 4. (All west of the Principal Meridian.) Sub-division of Township 4, Range 5. do do 5 do 5. East boundary of Townships 3, 4, 5 and 6, Range 5. North do do 3, Range 5. (All east of the Principal Meridian.)
Bouchette, C. J. . .	Montreal, Que. . . .	Sub-division of Township 4, Ranges 5 and 6. do do 3, do 5 and 6. do do 10, Range 8.* North boundary of Township 3, Ranges 5 and 6. East do do 3 and 4, Range 6. East do do 10, Range 8. (All west of the Principal Meridian.)

\* The township was completed in 1873 by Bouchette.

SCHEDULE (No. 3) showing Surveyors employed and Work performed by each, during the year 1872—*Continued.*

Name.	Residence.	Description of Work performed.
Bayne, G. A. . . .	Pictou, N.S. . . . .	Sub-division of Townships 13 and 14, Range 6. do part of Townships 13 and 14, Range 5. East boundary of Townships 13 and 14, Range 5. North do Township 13, Range 6. Part of north boundary of Township 13, Range 5. (All east of the Principal Meridian.)
Campbell, D. S. . . .	Mitchell, Ont. . . . .	Sub-division of Township 9, Range 2. North boundary of Township 9, Range 2. (All west of the Principal Meridian.)
Cooper, T. W. . . . .	Guelph, Ont. . . . .	Sub-division of Townships 9 and 10, Ranges 3 and 4. North boundary of Township 9 do 3 and 4. East do of Townships 9 and 10, Range 4. (All west of the Principal Meridian.)
Chapman, C. F. . . .	Preston, Ont. . . . .	Sub-division of Township 11, Ranges 3 and 4. do south $\frac{1}{2}$ of Township 12, Range 4. do north-east part of Township 12, Range 3. East boundaries of Townships 11 and 12, Range 4. North do Township 11, Ranges 3 and 4. (All west of the Principal Meridian.)
Cheeseman, Thos. . .	Mitchell, Ont. . . . .	Sub-division of Townships 7 and 8, Ranges 5 and 6. North boundary of Township 7 do 5 and 6. East boundaries of Townships 7 and 8, Range 5. Sub-division of Township 14, Range 4. do part do 13, Ranges, 3 and 4. East boundaries of Townships 13 and 14, Range 3. North do Township 13, Ranges 3 and 4. South do do 7 do 5 and 6. (All east of the Principal Meridian.)
Caddy, E. C. . . . .	Cobourg, Ont. . . . .	Sub-division of Township 15, Range 1. do do 14, Ranges 2 and 3. do do 13, Range 3. do Townships 9 and 10, Ranges 5 and 6. North boundary of Township 9 do 5 and 6. East do Townships 9 and 10, Range 5. North do Township 15, Range 1. East do do 15, do 1. East do do 14, do 2. Part north boundary of Township 13, Range 3. (All east of the Principal Meridian.)
Davidson, O. B. . . .	Amherst, N.S. . . . .	Sub-division of Township 5, Ranges 9 and 10. do do 6, Range 10. North boundary do 5, Ranges 9 and 10. East do Townships 5 and 6, Range 10. Sub-division of Township 9, Range 1. North and west boundaries of Township 9, Range 1. (All west of the Principal Meridian.)
Doupe, Joseph. . . .	Angus, Ont. . . . .	North boundary of Township 8, Ranges 7 to 14, inclusive. East do Townships 7 and 8, Range 7. Part east boundary of Township 8, Range 15. East do do 9 do 9. South do do 7, Ranges 7 and 8. North do do 10 do 9 and 10. South do do 11 do 9 and 10. South do do 11 do 1, 2, 3 and 4. (All West of the Principal Meridian.)
Dennis, John. . . .	Weston, Ont. . . . .	Exploration—Country on Brokenhead River, and towards the foot of the Lake of the Woods.
Grant, John. . . . .	Winnipeg, Man. . . .	Sub-division of Townships 3 and 4, Ranges 1 and 2. North boundary of Township 3 do 1 and 2. East do Townships 3 and 4, Range 2. (All west of the Principal Meridian.) Sub-division of Township 14, Range 1. East boundary do 14 do 1. Sub-division do 4 do 6. (All east of the Principal Meridian.)
Harris, M. . . . .	Thunder Bay, Ont.	Exploration—Duck Mountains, Dauphin Lake, west shore of Lake Manitoba, south of Manitoba House.

SCHEDULE (No. 3) showing Surveyors employed and Work performed by each, during the year 1872—*Continued.*

Name.	Residence.	Description of Work performed.
Hermon & Bolton.	Listowel, Ont. ....	Sub-division of Townships 13 and 14, Ranges 3 and 4. do Township 14, Range 5. do north half of Township 13, Range 5. North boundary of Township 13, Ranges 3, 4 and 5. East do Townships 13 and 14, Range 4. Sub-division do 13 and 14, Ranges 11 and 12. North boundary of Township 13, Ranges 11 and 12. East do Townships 13 and 14, Range 12. (All west of the Principal Meridian.)
Johnston, John....	Hull, Que .....	Sub-division of Township 13, Range 7. East boundary do 13 do 7. South do do 7 do 1, 2, 3 and 4. North do do 8 do 9 and 10. East do do 7 and 8, Ranges 6, 8 and 10. East do do 9 and 10 do 8 and 10. (All east of the Principal Meridian.)
Kennedy, L .....	Toronto, Ont.....	Sub-division of Township 2, Ranges 1, 3 and 4. North boundary do 1 do 1, 3 and 4. North do do 2 do 1, 3 and 4. East do do 2 do 1, 2, 3 and 4. West do do 2 do 1. South do do 3 do 5, 6 and 7. North do do 6 do 7 and 8. East do do 3 and 4, Range 6. (All east of the Principal Meridian.)
Lawe, Henry.....	Dunnville, Ont....	Sub-division of Township 13, Range 1. North boundary do 13 do 1. East do do 13 do 1. Sub-division of do 11 do 5. do do 11 and 12, Range 6. East boundary do 11, Range 5. North do do 11 do 6. (All east of the Principal Meridian.)
Lippé, A. W.....	Acton, Que. ....	Sub-division of Township 7, Range 3. do do 7 and 8, Range 4. North boundary do 7, Ranges 3 and 4. East do do 7 and 8, Range 3. Sub-division do 7, Range 5. North boundary do 5 do 5. (All east of the Principal Meridian.)
LeBer, Charles. .	Montreal, Que....	Sub-division of Townships 5 and 6, Ranges 3 and 4. North boundary do 5, Ranges 3 and 4. East do do 5 do 3. (All east of the Principal Meridian.)
LeBer, H.....	St. Wenceslas, Que	Sub-division of Townships 3 and 4, Ranges 11 and 12. North boundary do 3, Ranges 11 and 12. East do do 3 and 4, Range 12. (All west of the Principal Meridian.)
Morris, John.....	Perth, Ont.....	Sub-division of Township 13, Range 2. North and east boundaries, Township 13, Range 2. (All east of the Principal Meridian.)
		Sub-division of Townships 5 and 6, Ranges 1 and 2. North boundary do 5, Ranges 1 and 2. East do do 5 and 6, Range 2. (All west of the Principal Meridian.)
Martin, A. F. . .	Bic, Que.....	Sub-division of Townships 7 and 8, Range 7. do do 7, Range 8. North boundary do 7 do 7 and 8. South do do 7 do 7. East do do 7 and 8, Range 7. (All east of the Principal Meridian.)
McGuin, S. O. ....	Loughboro, Ont...	Sub-division of Townships 3 and 4, Ranges 3 and 4. North boundary do 3, Ranges 3 and 4. East do do 3 do 3. East do do 4 do 3. (All east of the Principal Meridian.)



SCHEDULE (No. 3) showing Surveyors employed and Work performed by each, during the year 1872—*Continued.*

Name.	Residence.	Description of Work performed.
McLatchie, John	Templeton, Que...	Sub-division of Townships 15, 16, 17 and 18, Ranges 13 and 14. South boundary do 15, Ranges 15 and 16. North do do 15 do 13 and 14. North do do 16 do 11, 12, 13, 14, 15 and 16. Part north boundary Township 16, Range 17. North boundary Township 17, Ranges 13 and 14. North do do 18 do 13, 14, 15 and 16. East do do 15, 16, 17 and 18, Ranges 13, 14 and 15. East do do 15 and 16, Range 17. 5 miles in Township 17, Range 11. (All west of the Principal Meridian.)
McFadden, M....	Newry, Ont.....	Survey of part of Parishes of Baie St. Paul, Poplar Point, High Bluff and Portage la Prairie.
McArthur, Jas. ...	Aylmer, Que.....	Sub-division of Townships 3 and 4, Ranges 7 and 8. North boundary do 3, Ranges 7 and 8. East do do 3 and 4, Range 8. (All west of the Principal Meridian.)
McPhillips, G., sr.	Seaforth, Ont.....	Survey of part of Parishes of St. Charles, Headingly, St. Anne's and St. François Xavier.
Newcomb, Geo. F.	King's Co., N.S...	Exploration of west shore of Lake Winnipeg, including islands and rivers as far north as the Narrows.
Otty, W. & J. McG.	St. John, N.B....	Sub-division of Townships 5 and 6, Ranges 5 and 6. do do do 3 and 4 do 13 and 14. North boundary do 5 do 5 and 6. East do do 5 and 6 do 6. North do do 3 do 13 and 14. East do do 3 and 4 do 14. (All west of the Principal Meridian.)
Reid, J. Lestock..	Bowmanville, Ont.	North boundary, Township 10, Ranges 5, 6, 7 and 8. East do 9 and 10 do 5 and 7. East do 10 do 9. East do 9 and 10 do 11. (All west of the Principal Meridian.) North boundary, Township 14, Ranges 1 and 2. Part east do 13 do 2. 6 miles of Township 14, Range 2. (All east of the Principal Meridian.)
Rainboth, G. C...	Aylmer, Que.....	Exploration of east shore of Lake Winnipeg, including rivers as far north as Beren's River.
Richard, J. B....	Wotton, Que.....	Sub-division of Townships 3 and 4, Range 1. do do 7 and 8 do 1 and 2. do do 5 do 6. North boundary, Township 3 do 1. North do 7 do 1 and 2. East do 7 and 8 do 1. (All east of the Principal Meridian.)
Russell, A. L....	Ottawa, Ont.....	South boundary, Township 11, Ranges 5, 6, 7 and 8. East do 11 and 12 do 5. East do 11 do 7 and 9. (All west of the Principal Meridian.)
Sinclair, Duncan..	Winnipeg, Man...	Part of Parishes of St. James, St. Charles, St. John, Kildonan, St. Paul, St. Boniface, St. Vital and St. Norbert.
Snow, John A....	Hull, Que.....	Sub-division of Townships 7 and 8, Ranges 1, 2, 3 and 4. North boundary do 7 do 1, 2, 3 and 4. East boundaries do 7 and 8 do 2 and 4. (All west of the Principal Meridian.) Sub-division of Townships 5 and 6, Ranges 1 and 2. North boundary do 5 do 1 and 1 mile in Range 2 East. (All east of the Principal Meridian.) East boundary of Township 6, Range 1. East do 5 do 1. (All east of Principal Meridian.)

SCHEDULE (No. 3) showing Surveyors employed and Work performed by each,  
during the year 1872—*Concluded*.

Name.	Residence.	Description of Work performed.
Sadler, David.....	Dalhousie, N.B....	Sub-division of Townships 13 and 14, Ranges 1 and 2. North boundary do 13 do 1 and 2. East do do 13 and 14 do 2. (All west of the Principal Meridian.) Sub-division of Township 6, Range 6. South boundary do 6 do 6. Sub-division do 12 do 5. East boundary do 12 do 5. (All east of the Principal Meridian.)
Staunton, F. H. L.	Dundas, Ont.....	Sub-division of Townships 7 and 8, Range 5. North boundary do 7 do 5 and 6. East do do 7 and 8, do 6. Sub-division of parts do 14 do 9 and 10. (All west of the Principal Meridian.)
Svenkernd, H.....	Ottawa, Ont.....	Exploration of the Lake of the Woods and Lake Roseau.
Smith, H. B.....	Ottawa, Ont.....	Explorations on Lakes Winnipeg, Manitoba and Winnipegosis, and survey for canal at Meadow and Mossy Portages.
Vaughan, A. H...	Bury, Que.....	Sub-division of Township 10, Ranges 1 and 2. East boundary do 10 do 2. North do do 10 do 2. (All west of the Principal Meridian.)
Warren, J.....	Acton, Ont.....	Sub-division of Township 9, Range 7, east of the Principal Meridian. Sub-division of parts of Townships 11 and 12, Ranges 1 and 2. East boundary do do 11 and 12 do 2. North do do do 11 do 1. Sub-division do do 11 and 12 do 9. North boundary do 11 do 9. East do do 11 and 12 do 10. (All west of the Principal Meridian.)
Webb, A. C.....	Brighton, Ont....	North boundary of Township 12, Ranges 11, 12, 13 and 14. North do do 14 do 13 and 14. East do do 11 and 12 do 11. East do do 11, 12, 13, and 14, Ranges 13 and 15. South do do 15, Ranges 13 and 14. (All west of the Principal Meridian.)
Wagner, W.....	Toronto, Ont.....	Sub-divisions of Townships 15, 16 and 17, Ranges 1, 2, 3 and 4. do do part of Township 15, Range 5. North boundary of Township 15, Ranges 1, 2, 3 and 4. North do do 17 do 1, 2, 3 and 4. East do do 17 do 1 (2 miles.) East do do 15 and 17 do 2. East do do 15, 16 and 17 do 4. East do do 15 do 5. (All west of the Principal Meridian.) East shore of Lake Manitoba, from Province Lines to the Narrows. Part of Oak Point Settlement. Part of Settlement of St. Laurent.

SCHEDULE (No. 4) showing Surveyors employed and Work performed by each,  
during the year 1873.

Albright, G. N...	Portage la Prairie, Man.	Sub-division of Townships 9 and 10, Range 6. do do 11, Range 5, and part of Tp. 11, Range 6. North boundary, Township 9, Range 6. North do do 11 do 5. East do do 11 do 6. East do do 11 do 7. (All west of the Principal Meridian.)
Beatty, W. & D...	Delta, Ont.....	Sub-division of Townships 7 and 8, Ranges 13 and 14. do do 11 and 12 do 13 and 14. do do 13, 14, 15 and 16, Range 17. do do 13, 14, 15 and 16 do 19. do do 15 and 16, Ranges 21, 22, 23, 24, 25 and 26.

SCHEDULE (No. 4) showing Surveyors employed and Work performed by each, during the year 1873—*Continued.*

Name.	Residence.	Description of Work performed.
Beatty, W. & D...	Delta, Ont. ....	South boundary, Township 7, Ranges 13 and 14. North do 8 do 13 and 14. South do 11 do 13 and 14. North do 11 do 13 and 14. East do 7, 8, 9, 10 do 13. East do 7 and 8 do 14 and 15. East do 11 and 12 do 14. North do 13 do 17. North do 15 do 17. East do 13, 14, 15, 16 do 18. North do 15 do 19. East do 16 do 19. North do 15 do 21, 22, 23, 24, 25 and 26. East do 15 and 16 do 22, 24 and 26. (All west of the Principal Meridian.)
Bayne, G. A. ....	Pictou, N.S. ....	Sub-division of Townships 11 and 12 and part of 13, Range 10. North boundary, Township 11, Range 10. Sub-division of do 20 do 16. South boundary do 20 do 16. (All west of the Principal Meridian.) Sub-division of Townships 9, 10, 11 and 12, Range 7. do do 11 and 12 do 8. East boundary, Townships 9, 10, 11 and 12 do 7. North do 9, Range 7. North do 11 do 7 and 8. (All east of the Principal Meridian.)
Burke, W. ....	Winnipeg, Man. ....	Sub-division of Townships 17 and 18, Range 17. East boundary do 17 and 18 do 18. (All west of the Principal Meridian.)
Bouchette, C. J. ....	Montreal, Que. ....	Sub-division of Townships 9 and 10, Range 7. do do 9 do 8. do do 11 do 8. North boundary do 9 do 7 and 8. East do do 9 do 8. East do do 11 do 8. Sub-division do 17 and 18 do 15. North boundary do 17 do 15. East do do 17 and 18 do 16. (All west of the Principal Meridian.)
Bray, E. ....	Oakville, Ont. ....	South boundary of Township 19, Ranges 11, 12, 13 and 14. North do 20 do 11, 12, 13 and 14. North do 22 do 13 and 14. East do 19 and 20, Range 11. East do 19, 20, 21 and 22, Range 13. (All west of the Principal Meridian.)
Brown, C. P. ....	Winnipeg, Man. ....	Sub-division of Townships 15, 16, 17 and 18, Range 9. do do 15, 16, 17, 18, 19 and 20, Range 10. do do 17 and 18, Ranges 11 and 12. North boundary do 15, Ranges 9 and 10. do do 16, 17 and 18, Ranges 9 and 10. do do 17, Ranges 11 and 12. do do 18 do 11 and 12. do do 19 and 20, Range 10. Part east boundary do 16 and 17 do 9. East boundary do 15, 16, 17, 18, 19 and 20, Range 10. do do 18, Range 11. do do 17 and 18, Range 12. Part of sub-division do 16 and 17 do 8. North boundary do 16 do 8. (All west of the Principal Meridian.)
Caddy, E. C. ....	Cobourg, Ont. ....	Sub-division of Township 16, Range 1. do do 15 and 16, Ranges 2 and 3. do East half of Township 14, Range 3. North boundary of Township 16, Ranges 1 and 2. do do 15 do 2 and 3. do do 14 do 2 and 3. East boundary do 16 do 1. do do 15, 16 do 2. South boundary do 15 do 2. (All east of the Principal Meridian.)



SCHEDULE (No. 4) showing Surveyors employed and Work performed by each, during the year 1873—*Continued.*

Name.	Residence.	Description of Work performed.
Davidson, O. B...	Winnipeg, Man...	Sub-division of Township 5, Range 7. do do 5 and 6, Range 8. do do 6 do 9. do Part of Township 6, Range 10. (All west of the Principal Meridian.)
Doupe, Jos. ....	Winnipeg, Man...	Sub-division of Township 8, Range 7. West and south boundaries of Township 8, Range 7. East boundary, Townships 21 and 22, Range 15. North do 22 do 15 and 16. North do 10 do 15, 16, 17 and 18. North do 8 do 15 and 16. East do 9 and 10 do 15 and 17. (All west of the Principal Meridian.)
Eaton, W. Case, ..	St. James, Man...	Sub-division of Townships 19 and 20, Range 15. North boundary do 19 do 15. East boundaries do 19 and 20 do 16. (All west of the Principal Meridian.)
Gore, W. S. ....	Gore's Landing, Ont.	Survey of Hudson's Bay Company's Reserves at— Fort Ellice, Fort Pelly, Fort Qu'Appelle, Touchwood Hills, Fairford Mission, Carlton House, Prince Albert, Fort la Corne, Moose Woods, Battle River, Fort Pitt, St. Paul, Fort Victoria, Fort Edmonton, Lac la Biche, Pigeon Lake, Rocky Mountain House, Fort Assiniboine, Old White Mud Fort, Lac la Nonne, Lac Ste. Anne, Cumber- land House, Moose Lake, Grand Rapids West, Grand Rapids East, Shoal River, St. Albert.
Grant, John.....	Winnipeg, Man...	Sub-division of Townships 3 and 4, Range 2. do do 2 and 3 do 5 and 6. North boundary of Township 3, Range 2. North do 1 and 2, Ranges 5 and 6. North do 3 do 6. East do 2 do 5 and 6. (All east of the Principal Meridian.)
Hermon & Bolton	Listowell, Ont....	Sub-division of Townships 13 and 14, Range 20. do do 11 and 12 do 12. do do 13 and 14 do 23, 24, 25 and 26. North boundary Township 13 do 20. East do 13 and 14 do 20. South do 11 do 12. North do 11 do 12. East do 12 do 12. North do 13 do 23, 24, 25 and 26. East do 13 and 14 do 24, 26 and 27. North do 12 do 26. (All west of the Principal Meridian.)
Holmes, J .....		Sub-division of Township 13, Range 14. do do 16 do 20. do do 11 do 16. do do 14 do 21. do do 15 do 20. do do 13 do 21. do do 14 do 14. do do 12 do 16. North boundary Township 13 do 14. North do 15 do 20. North do 12 do 21. South do 12 do 16. East do 15 and 16, Range 20. (All west of the Principal Meridian.)
Johnston, John...	Hull, Que .....	Sub-division of Township 13, Range 8. do do 14 do 7 and 8. East boundary of Townships 13 and 14, Range 8. East do 14 do 7. North do 13 do 7 and 8. North do 14 do 7 and 8. (All east of the Principal Meridian.)

SCHEDULE (No. 4) showing Surveyors employed and Work performed by each, during the year 1873—*Continued.*

Name.	Residence.	Description of Work performed.
Johnston, John....	Hull, Que .. . . .	Sub-division of Township 15, Range 18. do 15 and 16, Range 15. North boundary of Township 15 do 15. North do 15 do 18. (All west of the Principal Meridian.)
Kennedy, L. ....	Toronto, Ont. ....	East boundaries of Townships 3, 4, 5 and 6, Range 10. East do 3, 4, 5 and 6 do 8. South do 3 do 8, 9 and 10. North do 4 do 7, 8, 9 and 10. North do 6 do 9 and 10. (All east of the Principal Meridian.) North boundary of Township 11, Range 11. East do 11 do 12. East do 12 do 12. South do 11 do 11.
Lloyd, Geo. ....	.....	Sub-division of Townships 11 and 12, Range 11. (All west of the Principal Meridian.) Sub-division of Townships 15 and 16, Range 16. do 17 and 18 do 16. do 17 and 18 do 18. North boundary, Townships 15 and 17 do 16. North do 17 do 18. East do 15 and 16 do 16. (All west of the Principal Meridian.)
LeBer, H. ....	St. Wenceslas, Que.	Sub-division of Townships 15 and 16, Range 4. North boundaries of Township 16, Ranges 3 and 4. do 15, Range 4. South do 15 do 4. East do 15 and 16, Ranges 3 and 4. (All east of Principal Meridian.) Sub-division of Townships 19 and 20, Ranges 13 and 14. do 13 and 14, Range 13. North boundaries of Township 19, Ranges 13 and 14. do 13, Range 13. East boundaries of Townships 19 and 20, Range 14. do 13 and 14 do 14. (All west of Principal Meridian.)
McLatchie, J. ....	Ottawa, Ont. ....	South boundary of Township 15, Ranges 17 to 28, inclusive. North do Townships 16 and 18, Ranges 17 to 28, inclusive. East do do 17 and 18, Range 17. do do 15, 16, 17 and 18, Ranges 19, 21, 23, 25 and 27. (All west of Principal Meridian.)
Martin, A. F. ....	Emerson, Man. ....	Sub-division of Township 8, Ranges 3 and 8. do part of Township 2, Range 2. Part of north and south boundaries of Township 2, Range 2. (All east of the Principal Meridian.)
McFadden, M. ....	Newry, Ont. ....	Traverse of part of Red River. Sub-division of Township 8, Range 8. do Townships 9 and 10, Ranges 9 and 10. East boundary of Township 8, Range 9. do Townships 9 and 10, Range 10. North boundary of Township 7, Range 8. do 9, Ranges 9 and 10. (All west of Principal Meridian.)
McArthur, J. ....	Aylmer, Que. ....	Sub-division of Township 6, Range 7. do Townships 3 and 4, Ranges 9 and 10. North boundary of Township 5, Ranges 7 and 8. do 3 do 9 and 10. East boundary of Townships 5 and 6, Range 8. do 3 and 4 do 10. (All west of Principal Meridian.)
Otty, Wm. ....	St. John, N.B. ....	Sub-division of Townships 7 and 8, Range 12. do 11 and 12 do 18. do 11 and 12 do 20. Sub-division of Township 11, Range 22.

SCHEDULE (No. 4) showing Surveyors employed and Work performed by each,  
during the year 1873—*Continued.*

Name.	Residence.	Description of Work performed.
Otty, Wm.....	St. John, N.B....	East boundaries of Townships 7 and 8, Range 12. do Township 12, Range 18. do do 12 do 20. do do 11 do 22. North boundaries of Township 7, Range 12. do 11 do 20. do 11 do 18. South boundaries of Township 7 do 12. (All west of Principal Meridian.)
Otty, J. ....	St. John, N.B....	Sub-division of Townships 7 and 8, Range 11. do 11 and 12 do 19. Sub-division of Township 12, Range 22. do 21 do 16. do 11 do 23. Sub-division of Townships 11 and 12, Range 17. North boundaries, Township 7, Range 11. do 11 do 19. do 21 do 16. do 11 do 17. do 11 do 23. South boundaries, Township 7 do 11. do 12 do 22. East boundaries of Townships 7 and 8, Range 11. do Township 12, Range 22. do Townships 21 and 22, Range 16. do Township 11, Range 20. do do 11 do 18. (All west of Principal Meridian.)
Reid, J. L.....	Port Arthur, Ont..	South boundaries of Township 19, Ranges 15, 16, 17 and 18. North do 20 do 15, 16 and 17. East boundaries of Townships 19 and 20, Range 15. do 19, 20, 21 and 22, Range 17. (All west of Principal Meridian.)
Reiffenstein, J. H.	Ottawa, Ont. ...	Sub-division of Townships 13 and 14, Range 16. do Township 12, Range 25. do Townships 13 and 14, Range 22. East boundaries of Townships 13 and 14, Range 16. do 13 and 14 do 22. North boundaries of Township 13, Range 16. do 13 do 22. South boundaries of Township 12 do 25. (All west of Principal Meridian.)
Richard, J. B.....	Wotton, Que.....	Sub-division of Townships 13 and 14, Range 15. do Township 12, Range 23. do Townships 13 and 14, Range 18. do do 11 and 12 do 24. North boundaries of Township 13, Ranges 15 and 18. do 11, Range 24. East boundaries of Townships 11 and 12, Range 24. (All west of Principal Meridian.)
Russell, A. L.....	Port Arthur, Ont..	Sub-division of Township 1, Ranges 3 and 4. East boundaries of Township 1, Ranges 3 and 4. South do 1 do 3 and 4. (All east of Principal Meridian.)
Sinclair, Duncan..	Winnipeg, Man...	Sub-division of Township 5, Range 8. North boundary do 5 do 8. (All east of Principal Meridian.)
Vaughan, A. H...	do ...	Sub-division of Township 17, Range 2. do do 17, Ranges 3 and 4. do 18 do 3 and 4. East boundary do 17 do 1, 2 and 3. East do do 18 do 2 and 3. North do do 17 do 2, 3 and 4. North do do 18 do 3 and 4. South do do 17, Range 3. (All east of Principal Meridian.) Survey of part of Red River and Indian Settlement, in the Parish of St. Peter. Survey of part of Indian Reserve line in the Parish of St. Peter.



SCHEDULE (No. 4) showing Surveyors employed and Work performed by each, during the year 1873—*Concluded*.

Name.	Residence.	Description of Work performed.
Webb, A. C. ....	Brighton, Ont. ....	South boundary of Township 11, Ranges 15 to 25. North do do 12 do 15 to 25. North do do 14 do 15 to 26 East do do 11, 12, 13 and 14, Ranges 17, 19, 21, 23 and 25. (All west of Principal Meridian.)
Warren, J. ....	Kincardine, Ont. ..	Sub-division of Townships 11 and 12, Ranges 15 and 21. East boundary do 11 and 12, Range 16. North do do 11, Ranges 15 and 21. (All west of Principal Meridian.)
Wagner, Wm. ....	Ossowa, Man. ....	Sub-division of Townships 19 and 20, Range 5. do do 20, Range 6. do part of Township 18, Range 5. do part of do 19 do 6. do part of do 20 do 7. North boundaries do 19 and 20, Ranges 5 and 6. Part of north boundaries of Township 18, Range 5. North boundary of Township 20, Range 7. East do do 18, 19 and 20, Range 5. East do do 20, Range 7. Part of east boundary of Township 19, Range 6.

SCHEDULE (No. 5) showing Surveyors employed and Work performed by each, during the year 1874.

Albright, G. N. ...	Portage la Prairie.	Sub-division of Townships 7 and 8, Range 6. North boundary do 7, Range 6. (All west of Principal Meridian.)
Bolton, L. ....	Listowell, Ont. ....	Sub-division of Township 8, Ranges 9 and 10. North boundary do 7 do 9 and 10. East do do 8 do 10. (All west of Principal Meridian.)
Burke, W. ....	Winnipeg, Man. ...	Sub-division of Township 17, Range 20. do do 18 do 19. North boundary do 17 do 19 and 20. East do do 18 do 20. East do do 17 do 20. Sub-division do 17 do 19. (All west of Principal Meridian.)
Brown, C. P. ...	do ...	Sub-division of Townships 19 and 20, Ranges 9, 11 and 12. North boundary do 19, Ranges 9, 11 and 12. East do do 19 and 20, Range 12. South do do 18, Range 9. (All west of Principal Meridian.)
Doupe, Jos. ....	do ...	Sub-division of Township 7, Range 7. do part of Township 7, Range 8. East boundary of Township 7, Range 8. (All west of Principal Meridian.)
Grant, John. ....	do ..	Sub-division of Township 10, Range 8. North boundary do 10 do 8. (All east of Principal Meridian.)
Harris, J. W. ...	Port Arthur, Ont. ..	Part of outer 2 miles in the Parishes of St. John, St. James, St. Charles (north), Kildonan and St. Paul (west).
Johnston, J. ....	Hull, Que. ....	Sub-division of Township 16, Range 18. (West of Principal Meridian.) Sub-division of Townships 15 and 16, Ranges 6 and 7. do do 17, do 7 and 8. North boundary do 15, do 6 and 7. North do do 16, do 7. North do do 17, do 7. East do do 15, do 5. East do do 15 and 16, do 6 and 7. (All east of Principal Meridian.)

**SCHEDULE (No. 5) showing Surveyors employed and Work performed by each, during the year 1874—Concluded.**

Name.	Residence.	Description of Work performed.
Kennedy, L . . . . .	Toronto, Ont. . . . .	Sub-division of Township 1, Ranges 1 and 2. South boundary do 1, do 1 and 2. East do do 1, do 1. West do do 1, do 1. (All east of Principal Meridian.)
McPhillips, Geo. . . . .	Winnipeg, Man. . . . .	Sub-division of part of Township 11, Range 7. (West of Principal Meridian.) Part of the Parish of St. Agathe, 2 mile lines in Parishes of Head- ingly, St. Vital, Baie St. Paul, St. François Xavier.
Martin, A. F. . . . .	Emerson, Man. . . . .	River lots in the outer 2 mile limit in the Parishes of St. Norbert, St. Charles, St. Boniface, St. Vital and High Bluff.
Pearce, Wm . . . . .	Calgary, Alberta. . . . .	Sub-division of part of Townships 11 and 12, Range 4. South boundary of Township 11, Range 4. (All east of Principal Meridian.) Survey of the outer 2 miles in the Parishes of Headingly and St. François Xavier.
Reiffenstein, J. H. . . . .	Ottawa, Ont. . . . .	Sub-division of Townships 15, 16 and 17, Range 8. East boundary do 15, 16 and 17, do 8. East do do 17, do 7. North do do 15, 16 and 17, do 8. South do do 15, do 8. (All east of Principal Meridian.)
Reid, J. L. . . . .	Port Hope, Ont. . . . .	Sub-division of Townships 9 and 10, Ranges 11 and 12. North boundary do 9 and 10, do 11 and 12. North do do 20, do 17, 18, 19 and 20. East do do 9 and 10, do 12. East do do 19 and 20, do 19 and 21. South do do 19, do 19, 20 and 21. (All west of Principal Meridian.)
Russell, A. L. . . . .	Port Arthur, Ont. . . . .	South boundary of Township 7, Ranges 18 and 19. East do do 7 and 8, do 18. North do do 8, do 19, 20, 21 and 22. (All east of Principal Meridian.)
Sinclair, Duncan. . . . .	Winnipeg, Man. . . . .	Sub-division of Townships 5 and 6, Range 7. do do 6, do 8. East boundary do 5 and 6, do 7. North do do 5, do 7. (All east of Principal Meridian.) Survey of the rear widths of the Parishes of Kildonan, St. Paul, St. John, St. James, St. Charles and St. Boniface.
Vaughan, A. H. . . . .	Winnipeg, Man. . . . .	Sub-division of Township 9, Range 8. do do 17 and 18, do 1. do do 18, do 2. North boundary do 9, do 8. North do do 18, do 1 and 2. North do do 17, do 1. East and West boundary of Township 17 and 18, Range 1. (All east of Principal Meridian.) Survey of the 2 mile line in the Parishes of St. Andrews, St. Clements and St. Peter.
Wagner, Wm. . . . .	Ossowa, Man. . . . .	Sub-division of E $\frac{1}{2}$ of Township 17, Range 1. Part of North boundary of Township 17, Range 1. (All west of Principal Meridian.) Survey of part of settlements of Oak Point and St. Laurent. South boundary of Township 19, Range 5.

**SCHEDULE (No. 6) showing Surveyors employed and Work performed by each, during the Year 1875.**

Bayne, G. A. . . . .	Pictou, N S. . . . .	Sub-division of Township 7, Ranges 9 and 10. South boundary do 7 do 9 and 10. East do do 7 do 9 and 10. (All west of Principal Meridian.)
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SCHEDULE (No. 6) showing Surveyors employed and Work performed by each,  
during the year 1875—*Continued.*

Name.	Residence.	Description of Work performed.
Brown, C. P. . . .	Winnipeg, Man. . .	Sub-division of Townships 9 and 10, Ranges 13, 14, 15 and 16. East boundary do 9 and 10 do 14 and 16. North do do 9 do 13, 14, 15 and 16. North do do 10 do 13 and 14. (All west of Principal Meridian).
Bray, Edgar. . . . .	Oakville, Ont. . . . .	South boundary Township 23, Ranges 17 and 18. North do 24 do 15, 16, 17 and 18. North do 22 do 17. East do 23 and 24 do 15 and 17. East do 23 to 28 do 19. (All west of Principal Meridian).
Doupe, Jos. . . . .	Winnipeg, Man. . .	East boundary Townships 21, 22, 23 and 24, Ranges 5 and 7. North do 24 do 5 to 9. East do 23 and 24 do 9. East do 10 do 15. (All west of Principal Meridian).
Eaton, W. C. . . . .	Winnipeg, Man. . .	Sub-division Township 21 and 22, Range 14. North boundary Township 21, Range 14. East do 21 and 22 do 14. (All west of Principal Meridian).
Forneri, C. C. . . . .	.....	Sub-division Township 5 south, Ranges 28 to 31. do do 6 do do 30. North boundary do 6 do do 28, 29 and 30. East do do 5 do do 29. (All east of Principal Meridian).
Grant, John. . . . .	Winnipeg, Man. . .	Sub-division of Township 3 and 4, Range 7. East boundary do 3 and 4 do 7. North do do 3 do 7. (All east of Principal Meridian).
Hart, M. . . . .	St. Mary's, Ont. . .	Remeasurement of Township 18, Ranges 16 and 18. do north boundary Township 17, Ranges 16 and 18. do do do 18 do 18. (All west of Principal Meridian).
Hermon & Bolton. . .	Listowell, Ont. . . .	South boundary of Township 23, Ranges 12, 13 and 14. North do 22 do 11 and 12. East do 25 to 29 do 15. East do 23 and 24 do 13. North do 24 do 13 and 14. North do 28 do 13 and 14. (All west of Principal Meridian).
Holmes, J. . . . .	.....	Sub-division of Township 17, Range 20. North boundary do 17 do 20. (All west of Principal Meridian).
Harris, M. . . . .	Port Arthur, Ont. . .	Town plot of Selkirk.
Kennedy, L. . . . .	Toronto, Ont. . . . .	Sub-division of Township 1, Ranges 1 to 6. South boundary do 1 do 1 to 6. East do do 1 do 2 to 7. (All west of Principal Meridian).
Kingston, G. M. . . . .	.....	Traverse of Big Island, Lake Winnipeg. North boundary of Township 22, Range 23 to 26. North do 20 do 23 to 26. East do 19 to 22 do 25 and 27. South do 19 do 23 to 26. (All west of Principal Meridian).
Martin, A. F. . . . .	Emerson, Man. . . . .	Sub-division of Township 1, Range 5, 6 and 7. do do 2 do 7. East boundary do 2 & 1 do 7. East do do 1 do 5 and 6. North do do 2 do 7. North do do 1 do 7. South do do 1 do 5, 6 and 7. (All east of Principal Meridian).
Miles, C. F. . . . .	Toronto, Ont. . . . .	Sub-division of Township 2, Range 20. do do 1, 2 and 3, Range 21. North boundary do 2, Range 21. East do do 2 do 21. (All east of the Principal Meridian).



**SCHEDULE (No. 6) showing Surveyors employed and Work performed by each,  
during the year 1875—Concluded.**

Name.	Residence.	Description of Work performed.
Miles, C. F. ....	Toronto, Ont.....	Traverse of White Fish District. do Sabaskong do (Lake of the Woods).
McPhillips, G ....	Winnipeg, Man...	Survey of part of the Parish of Portage La Prairie. Town plot of Gimli.
gilvie, Wm.....	Ottawa, Ont.....	Parish of Ste. Anne and Oak Point, and part of the Parishes of St. Norbert and St. Boniface. North boundary Township 22, Ranges 19, 20 and 21. North do do 20 do 21 and 22. East do 21 and 22 do 21. East do 19, 20, 21, 22 do 23. (All west of Principal Meridian.)
Pearce, Wm.....	Calgary, Alberta .	South boundary Township 7, Ranges 11 to 17. North do do 8, do 11 to 18. North do do 10, do 17 to 22. East do do 9 and 10, Ranges 18 and 20. East do do 7, 8, 9 and 10, Ranges 12, 14 and 16. (All east of Principal Meridian.)
Russell, A. L.....	Port Arthur, Ont.	Sub-division of Township 1, Ranges 23 and 24. East boundary do 1, do 24. East do do 1 and 2 south, Range 24. (All east of Principal Meridian.)
Reid, J. L.....	Port Hope, Ont...	South boundary of Township 1, Ranges 25 to 28. South do do 2, South Ranges 21 to 26. East do do 1 and 2, do 22. East do do 5 South do 28. East do part do 6 South Range 28. East do do 1 to 6, Range 26. East do do 1 and 2, and 3, South Range 22. East do do 3 and 4 South Ranges 22, 24 and 26. East do do 5 South Ranges 26 and 30. North do do 5 do 25 to 31. Sub-division of Township 3 South Ranges 21 to 26. (All east of Principal Meridian.)
Sinclair, Duncan..	Winnipeg, Man...	Sub-division Townships 17 and 18, Ranges 21 and 22. East boundary Townships 17 and 18, Range 22. North do do 17, Ranges 21 and 22. (All west of Principal Meridian.)
Vaughan, A. H...	do ...	Survey of rear line of settlements, County of Lisgar, and part of the Parishes St. Andrews, St. Clements, and St. Peters. Outer two miles and four miles line, Parish of St. Andrews and St. Clements, west.
Wagner, Wm.....	Ossowa, Man.....	Rear lines of the Parishes of Poplar Point and Baie St Paul and north boundary of Township 17, Range 5, west of Principal Meridian.
Webb, A. C.....	Brighton, Ont...	North boundary Township 22, Ranges 27, 28 and 29. North do do 20 do 27 to 30. North do do 18 do 29 and 30. North do do 16 do 29 and 30. East do do 15 to 22, Range 29. East do do 15 to 18 do 31. South do do 15, Ranges 29 and 30. South do do 19 do 27 to 30. (All west of Principal Meridian.)

**SCHEDULE (No. 7) showing Surveyors employed and Work performed by each,  
during the year 1876.**

Beatty, W.....	Delta, Ont...	Road Survey, Whitemouth to Gimli.
Doupe, Joseph....	Winnipeg, Man...	Sub-division of Township 23, Range 4. North boundary Township 23, Range 4. North do do 21 do 4. South do do 23 do 4. (All east of Principal Meridian.) Sub-division part of Township 7, Range 8, west of Principal Meridian.

SCHEDULE (No. 7) showing Surveyors employed and Work performed by each, during the year 1876—*Concluded.*

Name.	Residence.	Description of Work performed.
Forneri, C. C. ....		Sub-division Townships 4 and 5 South Range 27. do do 4 South Range 25. do do 4 and 5 South Range 26. do do 4 South Ranges 23 and 24. East boundary Township 4 South Ranges 24 and 25. East do do 4 do 23. East do do 3 do 21. East do do 5 do 27. North do do 4 do 22. Sub-division Township 3 South Range 22. (All East of Principal Meridian.)
Kennedy, L. ....	Toronto, Ont. ....	Sub-division Township 1, Ranges 7, 8 and 9. South boundary Township 1, Ranges 7, 8 and 9. East do do 1 do 7, 8, 9 and 10. (All west of Principal Meridian.)
McPhillips, Geo. .	Winnipeg, Man. .	Survey of villages of Sandy Bar and Rivertown. Subdivision Townships 21 and 22, Range 4. North boundary Township 21, Range 4. (All east of Principal Meridian.)
Martin, A. F. ....	Emerson, Man. ....	Survey of Water Hen River Indian Reserve, St. Martin's Lake Indian Reserve, Fairford Mission Indian Reserve.
Pearce, Wm. ....	Calgary, Alb. ....	Survey of outer 2 miles in the Parishes of St. Andrews, St. Clements, St. Boniface, Kildonan, St. Paul.
Russell, A. L. ....	Port Arthur, Ont.	South boundary Township 29, Ranges 6, 7 and 8. East do do 29 to 32, Range 9. East do do 16 to 29 do 1. North do do 32, Ranges 9, 10 11. North do do 28 do 1 to 5. (All west second Initial Meridian.) North boundary Township 16, Ranges 31, 32 and 33. (West of Principal Meridian.)
Stewart, E. ....	Collingwood, Ont.	Sub-division Township 3 South Ranges 23, 24 and 25. do 3 do 26. East boundary Township 3 do 23 and 25. Sub-division do 4 do 26. North boundary do 4 do 23, 24 and 26. (All east of Principal Meridian.)
Sinclair, Duncan. .	Winnipeg, Man. .	Sub-division and extension of Indian Reserve at Brokenhead River.
Wagner, Wm. ....	Ossowa, Man. ....	Survey of Qu'Appelle River from 102nd Meridian.

SCHEDULE (No. 8) showing Surveyors employed and Work performed by each, during the year 1877.

Beatty, W. ....	Delta, Ont. ....	Sub-division of Township 24, Range 4. North boundary do 24 do 4. East do do 24 do 4. (All east of Principal Meridian.)
Bray, E. ....	Oakville, Ont. ....	Survey of highways in Manitoba.
Doupe, J. ....	Winnipeg, Man. .	Sub-division of Township 20, Range 3. Part of sub-division of Townships 19, 20 and 21, Range 4. North boundary of Township 20, Range 3. East do do 20 do 3. West do do 20 do 3. (All east of Principal Meridian.)
King, W. F. ....	Ottawa, Ont. ....	Survey of the 5th Initial Meridian, Townships 52, 53 and 54. North boundary of Township 52, Range 1, west of 5th Meridian. do do 52, 13 miles east from 5th Meridian, thence south 5 miles.
McPhillips, Geo. .	Winnipeg, Man. .	Survey of part of the Parish of Lorette. Sub-division of Township 19, Range 3. do do 19 and 20, Range 4. North boundaries Township 19, Range 3. North do do 19 and 20, Range 4. North do do 18, Range 4.

SCHEDULE (No. 8) showing Surveyors employed and Work performed by each, during the year 1877—*Concluded*.

Name.	Residence.	Description of Work performed.
McPhillips, Geo. .	Winnipeg, Man. .	East boundary of Township 19, Range 3. East do do 19 do 2. South do do 19 do 3. (All east of Principal Meridian.)
Pearce, Wm. . . . .	Calgary, Alb. . . . .	Traverse of portion of lake, and Winnipeg River. South boundary of Township 1, Range 8, 9 and 10. East do do 1 and 2, Range 10. (All east of Principal Meridian.)
Russell, A. L. . . .	Port Arthur, Ont.	3rd Initial Meridian, Townships 43 to 47. North boundary of Township 46, Ranges 25, 26 and 27. South boundary of Township 47, Ranges 25, 26 and 27. East do do 47 and 48, Range 27. North do do 32, Ranges 11 to 16. East do do 33 to 36, Range 17. (All west of 2nd Initial Meridian.) North boundary of Township 46, Range 1, west of 3rd Meridian. South do do 47 do 1, do do North do do 36 do 17 to 3rd Meridian. 3rd Meridian, Township 37 to 42 inclusive. 2nd do do 30 to 34 do
Stewart, E. . . . .	Collingwood, Ont.	South boundary of Township 1, Ranges 10, 11 and 12. West do do 1 do 10, 11 and 12. Sub-division of Township 1, Ranges 10, 11 and 12. (All west of Principal Meridian.)

SCHEDULE (No. 9) showing Surveyors employed and Work performed by each, during the year 1878.

Aldous, M. . . . .	Winnipeg, Man. . . .	Part of Prince Albert and St. Laurent settlements.
Chapman, C. F. . . .	Preston, Ont. . . . .	Road survey from Headingly to western boundary of Manitoba.
Doupe, Jos. . . . .	Winnipeg, Man. . . .	Part of the Parish of Ste. Agathe.
Dennis, J. S. . . . .	Aylmer, Que. . . . .	North boundary Township 36, Ranges 1 to 18. North do do 40 do 19 to 28. North do do 42 do 16, 17 and 18. East do do 37 to 42, Range 19. (All west of 3rd Initial Meridian.)
King, W. F. . . . .	Ottawa, Ont. . . . .	East boundary Tp. 46, Range 27, west of 2nd Initial Meridian. South do do 45, Ranges 1 to 4. North do do 46 do 1 to 3. (West of 3rd Initial Meridian.)
Nelson, J. C. . . . .	Aylmer, Que. . . . .	Survey of part of Old Man's River from Fort Macleod eastward.
Pearce, Wm. . . . .	Calgary, Alb. . . . .	Part of east boundary Township 10, Range 9. East boundary Townships 11, 12, 13 and 14, Range 9. East do do 13 to 17, Range 10. North do do 12, Range 9. North do do 17 do 9 and 10. North do do 12 do 10. (All east of Principal Meridian.)
Reid, J. L. . . . .	Port Hope, Ont. . . .	Subdivision Townships 47 and 48, Range 24. Part of Township 47, Ranges 25, 26 and 28. Sub-division Township 48, Range 25. Sub-division part Township 47, Range 27. East boundary Township 48, Range 24. Part of east boundary Township 47, Range 28. East boundary Township 47, Range 27. South do do 48, do 24. West do do 47, do 27. (All west of 2nd Initial Meridian.)
Russell, A. L. . . .	Port Arthur, Ont. . .	North boundary Township 46, Ranges 20 to 24. North do do 47 do 25 and 26. North do of Sections 19 to 24, Township 47, Range 27. South do Township 47, Ranges 20 to 24. East do do 47 do 26. East do do 46 and 47, Ranges 21 and 23.



SCHEDULE (No. 9) showing Surveyors employed and Work performed by each, during the year 1878—*Concluded*.

Name.	Residence.	Description of Work performed.
Russell, A. L. ....	Port Arthur, Ont.	Part of east boundary Township 48, Ranges 21, 24 and 26. East boundary Township 47, Range 24. East do do 46 and 47, Range 25. (All west of 2nd Initial Meridian.)
Rauscher, R. ....	Ottawa, Ont. ....	Sub-division Townships 45, 46 and 47, Range 1. North boundary Townships 45 and 47, Range 1. West do do 45, 46 and 47, Range 1. (All west of 3rd Initial Meridian.)
Sinclair, Dun. ....	Winnipeg, Man. ....	Sub-division of broken Township 45, Ranges 26 and 27. Sub-division do do 45 and 46, Range 28. Sub-division do do 46, Ranges 25 and 26. Sub-division Township 46, Range 27. North boundary Township 45, Ranges 26 and 28. North do do 45, do 27. East do do 45, do 27 and 28. East do do 46, do 26 and 28. (All west of 2nd Initial Meridian.)

SCHEDULE (No. 10) showing Surveyors employed and work performed by each during the Year 1879.

Aldous, M. ....	Winnipeg, Man. ....	North boundary Township 52, Ranges 1 to 19. North do do 54 do 19. East boundary do 53 and 54, Ranges 19 and 24. North boundary do 54, Ranges 20 to 23. North do do 52 do 24 to 27. North do do 52 do 19 to 23. (All west of 4th Initial Meridian.) Fourth Initial Meridian from north-east corner of Section 25, Township 51, to 14th Base Line. Also 8½ Sections east from 4th Initial Meridian, starting from north-east corner Section 12, Township 52. 5th Initial Meridian, Townships 48 to 52 inclusive.
Beatty, W. ....	Delta, Ont. ....	4th do do 41 to 51 do East boundary Townships 3 to 8, Range 17. North do 4 and 6 do 15 and 16. South do 3 and 7 do 15 and 16. Sub-division Townships 3 and 4 do 15 and 16. North boundary Township 3 do 16 East do 3 and 4 do 16 (All west of Principal Meridian.)
Bray, E. ....	Oakville, Ont. ....	Indian Reserves, Treaty No. 6.
Caddy & Hewson	Cobourg, Ont. ....	Sub-division Townships 7 and 8, Ranges 15, 16, 17 and 18. North boundary Township 7, Ranges 15, 16, 17, 18. East do 7 and 8, Ranges 16 and 18. (All west of Principal Meridian.)
Crawford W. ....	Winnipeg, Man. ....	Sub-division Townships 17 and 18, Ranges 25 and 26. East boundary Townships 17 and 18, Range 26. North do 17 do 26. South do 18 do 25. (All west of Principal Meridian.)
Dean, M. ....	Lindsay, Ont. ....	Sub-division Townships 1 and 2, Ranges 15 and 16. North boundary Township 1 do 15 and 16. East do 1 and 2, Range 16. (All west of Principal Meridian.)
Doupe & Drummond.	Winnipeg, Man. ....	Sub-division Township 17 and 18, Ranges 23 and 24. North boundary Township 17, Ranges 23 and 24. East do 17 and 18, Range 24. (All west of Principal Meridian.)
Forrest, A. G. . .	Ottawa, Ont. ....	Timber limits on Winnipeg River.
Hart, M. ....	St. Mary's, Ont. ....	Inspection of contract surveys.
King, W. F. ....	Ottawa, Ont. ....	Indian Reserves, Treaty No. 6. Astronomical section of special survey, North-West Territories.

SCHEDULE (No. 10) showing Surveyors employed and Work performed by each,  
during the year 1879—*Concluded*.

Name.	Residence.	Description of Work performed.
Kirk, J. G. ....	Stratford, Ont. ....	Sub-division Townships 1 and 2, Ranges 17 and 18. North boundary Township 1 do 17 and 18. East do 1 and 2, Range 18. (All west of Principal Meridian.)
Klotz, O. J. ....	Preston, Ont. ....	Sub-division Township 1 and 2, Ranges 19 and 20. North boundary Township 1 do 19 and 20. East do 1 and 2, Range 20. (All west of Principal Meridian.)
McArthur, J. J. ...	Aylmer, Que. ....	Sub-division Townships 5 and 6, Ranges 15 and 16. North boundary Township 5 do 15 and 16. East do 5 and 6, Range 16. (All west of Principal Meridian.)
McAree, J. ....	Toronto, Ont. ....	Sub-division Township 2, Range 21. Sub-division do 1 do 22. Sub-division part of Township 2 Range 22. North boundary do 1 do 22. East do 1 and 2, Range 22. (All west of Principal Meridian.)
Miles, C. F. ....	do	Survey of Reserves under Indian Treaty No. 3.
Martin, F. A. ....	St. Andrews, Que..	Survey do do 2.
O'Hanly, J. L. P..	Ottawa, Ont. ....	South boundary Township 9, Ranges 17, 18, 19 and 20. East do 9 and 10, Range 21. East do 9 and 10 do 19. North do 10 do 17 and 18. (All west of Principal Meridian.)
Ogilvie, W. ....	do	Survey of Indian Reserves, Treaty No. 7.
Pearce, Wm. ....	Calgary, Alberta..	South boundary of Township 1, Ranges 15 to 32. North do 2 do 15 to 32. East do 1 do 15. East do 1 and 2 do 17, 19, 21, 23, 25, 27, 29, 31, & 33. (All west of the Principal Meridian.)
Patrick, A. P. ....	Ottawa, Ont. ....	Timber explorations, Lake Winnipegosis.
Rainboth, G. C. ....	Aylmer, Que. ....	Surveys of Reserves under Indian Treaty No. 7.
Reid, J. L. ....	Port Hope, Ont. ....	Timber Limits on Lake Winnipegosis. Sub-division of Townships 42, 43 and 44, Range 1. Sub-division do 43 and 44 do 2 and 3. North boundary do 43 do 1, 2 and 3. North do do 42 do 2 and 3. East boundary do 43 and 44 do 2, 3 and 4. East do do 42 do 2. (All west of 3rd Initial Meridian.)
Russell, A. L. ....	Port Arthur, Ont..	Sub-division of part of Township 45, Range 22. (West of 2nd Initial Meridian.) Survey of portions of the north and south branches of Saskatchewan River.
Simpson, G. A. ....	do	North boundary of Township 44, Range 17. (To the 3rd Initial Meridian.)
Stewart, Geo. ....	Winnipeg, Man. ....	East boundary of Township 37, Range 17. East do do 45 do 23 and 25. (All west of 2nd Initial Meridian.)
Stewart, E. ....	do	Surveys of Reserves under Indian Treaty No. 6.
Thomson, A. C. ....	do	Sub-division of Township 20, Ranges 19 and 20. South boundary do 20 do 19. East do do 20 do 20. (All west of the Principal Meridian.)
Vaughan, A. H. ...	Selkirk, Man. ....	Indian Reserves, Treaty No. 6.
Webb, A. C. ....	Brighton, Ont. ....	Sub-division of Township 19, Range 21. North boundary do 19 do 21.
Wagner, Wm. ....	Winnipeg, Man. ....	Part of south boundary of Township 19, Range 21. (All west of the Principal Meridian.) Surveys of Reserves under Indian Treaty No. 3. 2nd Initial Meridian, Township 9 to 16, inclusive. Survey of Sioux Indian Reserve, Pipe Stone Creek.

SCHEDULE (No. 11) showing Surveyors employed and Work performed by each,  
during the year 1880.

Name.	Residence.	Description of Work performed.
Abrey, G. B. ....	Little Current, Ont.	Sub-division of Townships 9 and 10, Ranges 19 and 20. Sub-division do 15 and 16 do 31. East boundary do 9 and 10 do 20. East do do 16 do 32. North boundary do 9 do 19 and 20. North do do 10 do 19 and 20. North do do 15 do 31. (All west of the Principal Meridian)
Aldous, M. ....	Winnipeg, Man. ....	East boundaries of Townships 1 to 12, Range 25. North do do 4 do 25. North do do 12 do 25 to 29. (All west of the 4th Initial Meridian.)
Armstrong, F. W. ....	Orillia, Ont. ....	5th Initial Meridian from Township 13 to Township 48. Sub-division of Township 17, Ranges 27 and 28. North boundary do 17 do 27 and 28. East do do 17 do 28. (All west of Principal Meridian.)
Bolger, F. ....	Ottawa, Ont. ....	Part of sub-division of Township 21, Range 31. (West of Principal Meridian.) Sub-division of Townships 5 and 6, Ranges 21 and 22. Sub-division do 9 and 10 do 25 and 26. North boundary do 5 do 21 and 22. North do do 9 do 25 and 26. East boundary do 5 and 6 do 22. East do do 9 and 10 do 26. (All west of Principal Meridian.)
Brabazon, S. L. ....	Portage du Fort, Que.	Sub-division Township 5, Ranges 25 and 26. Sub-division do 6 do 26. Sub-division do 2 do 31 and 32. Sub-division do 1 do 32 and 31. North boundary Township 5 do 25 and 26. North do 1 do 31 and 32. East do 5 and 6 do 26. East do 1 do 32. Part east do 2 do 32. (All west of Principal Meridian.)
Bray, Edgar ....	Oakville, Ont. ....	East boundary Townships 19 to 22, Ranges 31 and 33. East do 20 to 26 do 31. North do 22 do 29 to 33. North do 20 and 26 do 31, 32 and 33. North do 24 do 31, 32 and 33. South do 19 and 23 do 31, 32 and 33. (All west of Principal Meridian.)
Beatty, W. & D. ....	Delta, Ont. ....	Sub-division Townships 23 and 24, Ranges 27 and 28. North boundary do 23 do 27 and 28. East do do 23 and 24 do 28. (All west of Principal Meridian.)
Beatty, W. ....	Delta, Ont. ....	Sub-division Townships 17 and 18, Ranges 29 and 30. North boundary do 17 do 29 and 30. East do do 17 and 18 do 30. (All west of Principal Meridian.)
Breen, Thos. ....	L'Islet, Que. ....	Sub-division Townships 9 and 10, Range 18. North boundary do 9 do 18. East do do 9 and 10 do 18. (All west of Principal Meridian.)
Bemister, Geo. ....	Portage la Prairie, Man.	Sub-division Township 23, Range 2. Sub-division Townships 23 and 24, Range 1. (West of 2nd Initial Meridian.)
Cotton & McAree. ....	Ottawa, Ont. ....	Sub-division Townships 2, 7 and 8, Range 22. Sub-division do 5 and 6 do 17 and 18. Sub-division do 7 and 8 do 21. North boundary Township 5, Range 17 and 18. North do 7 do 21 and 22. East do 5 and 6 do 18. East do 7 and 8 do 22. (All west of Principal Meridian.)
Clementi, T. B. ....	Peterboro', Ont. ....	Sub-division Townships 19, 20 and 21, Ranges 1 and 2. (West of 2nd Initial Meridian.)



SCHEDULE (No. 11) showing Surveyors employed and Work performed by each,  
during the year 1880—*Continued.*

Name.	Residence.	Description of Work performed.
Caddy & Hewson.	Cobourg, Ont.....	Sub-division Townships 7 and 8, Ranges 17 and 18. North boundary do 7 do 17 and 18. East do do 7 and 8 do 18. (All west of Principal Meridian.)
Carbert, J. A.....	Orangeville, Ont..	Sub-division Township 1, Range 23. Sub-division Townships 1 and 2, Range 24. North boundary Township 1, Range 23 and 24. East do do 1 & 2 do 24. (All west of Principal Meridian.)
Doupe, Jos.....	Winnipeg, Man...	Sub-division Township 18, Range 20. Sub-division do 14, Ranges 29 and 30. Sub-division Townships 15 and 16, Ranges 27 and 28. North boundary Township 15, Ranges 27 and 28. East do 15 and 16 do 28. East do 14 do 30. East and south do 18 do 20. South do 14 do 29. (All west of Principal Meridian.)
Deville, E .....	Ottawa, Ont.....	South boundary of Township 27, Ranges 13 to 16. North do 30 do 13 to 16. East do 27 to 32 do 13. East do 27 to 30 do 17. (All west of 2nd Initial Meridian.)
Drummond, Thos..	Montreal, Que ..	North boundary of Township 23, Ranges 3 and 4. North do 25 do 5. North do 24 and 25 do 3 and 4. North do 23, 24 and 25 do 1 and 2. South do 25 do 5, 6, and 7. East do 23 to 26 do 3 and 4. East do 25 and 26 do 6. (All west of 2nd Initial Meridian.)
Evans & Bolger...	Belleville, Ont....	Sub-division of Townships 13 and 14, Ranges 27 and 28. Sub-division do 21 and 22 do 32 and 33. North boundary Township 13 do 27 and 28. North do 21 do 32 and 33. East do 13 and 14 do 28. East do 21 and 22 do 32. (All west of Principal Meridian.)
Forrest, A. G.....	Ottawa, Ont .....	Survey of timber limits on the Winnipeg River.
Garden, J. F.....	Toronto, Ont.....	Sub-division of Townships 5 and 6, Ranges 23 and 24. Sub-division do 1 and 2 do 29 and 30. North boundary Township 5 do 23 and 24. North do 1 do 29 and 30. East do 5 and 6 do 24. East do 5 do 23. East do 1 do 29 and 30. West do 2 do 29 and 30. (All west of Principal Meridian.)
Hart & Ryley.....	Ottawa, Ont.....	South boundary of Township 3, Ranges 25 and 26. North do 6 do 25 and 26. East do 3 do 25. East do 3, 4, 5 and 6, Range 27 (All west of Principal Meridian.)
Hart, M. ....	St. Mary's, Ont...	North boundary of Township 4, Ranges 19 to 34. North do 6 do 27 to 34. North do 1 do 33 and 34. South do 3 do 29 to 34. East do 4, 5 and 6, Range 25. East do 1 and 2 do 34. East do 3, 4, 5 and 6 do 29, 31 and 33. (All west of Principal Meridian.)
Hermion, R. W....	Listowell, Ont....	Sub-division of Townships 21 and 22, Ranges 29 and 30. Sub-division do 27 and 28 do 29 and 30. East boundary Townships 21 and 22 do 30. East do 27 and 28 do 30. North do 21 do 29 and 30. North do 27 do 29 and 30. (All west of Principal Meridian.)

SCHEDULE (No. 11) showing Surveyors employed and Work performed by each,  
during the year 1880—*Continued.*

Name.	Residence.	Description of Work performed.
Jephson, R. ....	Bracebridge, Ont..	Sub-division of Townships 1, 2 and 5, Range 27. Sub-division do 1, 2, 5 and 6 do 28. North boundary Townships 1 and 5 do 28. North & west do 5 do 27. West do 1 do 27. South do 2 do 27. East do 2 and 6 do 28. (All west of Principal Meridian.)
Klotz, O. J. ....	Preston, Ont. ....	East boundary of Townships 27 to 30, Range 14. East do 27 to 30 do 16. East do 27 to 30 do 15. North do 28 do 13 to 16. North do 27 and 29 do 13. North do 27 do 14 and 16. North do 29 do 14. Sub-division of Townships 27, 29 and 30 do 13. Sub-division do 28, 29 and 30 do 14. Sub-division do 27 and 28 do 16. (All west of 2nd Initial Meridian.)
King, W. F. ....	Ottawa, Ont. ....	Astronomical section of special survey, N.-W.T.
Lendrum, R. ....	Riceville, Ont. ....	Sub-division of Townships 27 and 28, Range 2. Sub-division of Township 27, Range 1. (All west of 2nd Initial Meridian.)
Lett, C. A. ....	Emerson, Man. ....	Sub-division of Townships 19 and 20, Ranges 27 and 28. North boundary Township 19 do 27 and 28. East do 19 and 20 do 28. (All west of Principal Meridian.)
Lippé, A. W. ....	Acton, Que. ....	Sub-division of Townships 1 and 2, Ranges 25 and 26. North boundary Township 1 do 25 and 26. East do 1 and 2 do 26. (All west of Principal Meridian.)
Morris, J. ....	Perth, Ont. ....	Sub-division of Townships 3 and 4, Range 18. Sub-division of Township 4 do 17. South boundary Township 4 do 17. North do 3 do 18. East do 3 and 4 do 18. (All west of Principal Meridian.)
McArthur, J. ....	Aylmer, Que. ....	Sub-division Townships 3 and 4, Ranges 21 and 22. Sub-division do 3 and 4 do 27 and 28. North boundary Township 3 do 21 and 22. North do 3 do 27 and 28. Part of east boundary Townships 3 and 4, Range 22. East boundary Townships 3 and 4, Range 28. (All west of Principal Meridian.)
McPhillips, R. C. .	Winnipeg, Man. .	Sub-division Townships 19 and 20, Ranges 31 and 32. North boundary Township 19 do 31 and 32. East do do 19 and 20, Range 32. (All west of Principal Meridian.)
McPhillips, Geo. .	do	Sub-division Townships 5 and 6, Ranges 19 and 20. Sub-division do 9 and 10 do 23 and 24. North boundary do 5, Ranges 19 and 20. East do do 5 and 6, Range 20. North do do 9, Ranges 23 and 24. East do do 9 and 10, Range 24. (All west of Principal Meridian.)
McAree, J. ....	Toronto, Ont. ....	Sub-division, Township 1, Range 21. North boundary Township 1 Range 21. (All west of Principal Meridian.)
McArthur, J. J. .	Aylmer, Que. ....	Sub-division Townships 19 and 20, Ranges 29 and 30. Sub-division do 26, Range 31. North boundary do 19, do 29 and 30. East do Townships 19 and 20, Range 30. (All west of Principal Meridian.)
McLatchie, J. ....	Ottawa, Ont. ....	East boundary Townships 23 and 24, Ranges 27 and 29. South do do 23, Ranges 27 to 30. North do do 24 do 27 to 30. East do do 25 and 26, Ranges 27 and 29.

**SCHEDULE (No. 11) showing Surveyors employed and Work performed by each,  
during the year 1880—Continued.**

Name.	Residence.	Description of Work performed.
McLatchie, J. ....	Ottawa, Ont. ....	Seventh Correction Line, south side, across Ranges 27 and 28. Seventh Correction Line, north and south sides, across Ranges 29 and 30. South boundary Township 26, Ranges 31, 32 and 33. North do do 28 do 29 and 30. East do do 27 and 28, Ranges 29 and 31. East do do 29 and 30 do 31. North do do 28, Ranges 31, 32 and 33. South do do 31 do 31, 32, and 33. (All west of Principal Meridian.)
Miles, C. F. ....	Toronto, Ont. ....	North boundary Townships 19 and 20, Ranges 1, 2 and 3. North do do 21, Ranges 1, 2 and 3. East do do 19, 20, 21 and 22, Ranges 2 and 3. East do do 21 and 22, Range 4. (All west 2nd Initial Meridian.)
O'Keeffe, D. C. ....	Hamilton, Ont. ....	Sub-division Townships 25 and 26, Ranges 1, 2, 3 and 4. (West of 2nd Initial Meridian.)
Ogilvie, Wm. ....	Ottawa, Ont. ....	South boundary Township 23, Ranges 9 to 12. North do do 26 do 5 to 8. North do do 26 do 12. North do do 22 do 1 to 4. East do do 23 to 26, Ranges 5, 9 and 13. (All west of 2nd Initial Meridian.)
O'Hanly, J. L. P.	do	South boundary of Township 7, Ranges 17 to 23. East do do 7 and 8, Ranges 19, 21, 23 and 30. East do do 9 and 10 do 23, 25 and 30. East do do 7 to 10 do 32. East do do 11 to 14 do 32. North do do 8, Ranges 21 to 23. North do do 10 do 21 to 26. North do do 7 do 29 to 34. North do do 9 do 29 to 34. North do do 11 and 13, Ranges 31 and 32. North do do 11, Ranges 33 and 34. (All west of Principal Meridian.)
Pearce, Wm. ....	Winnipeg, Man. . .	East boundary of Township 30, Range 15. East do do 3, 4, 5, 6, 31, 32, 33, 34, Range 19. South do do 31, Ranges 15 to 18. East do do 40, 41, 42, 43, 46 and 47, Range 19. South do do 35, 39, Range 19. North do do 32, Range 18. North do do 36 do 19 and 20. North do do 4 do 17 and 18. North do do 44 do 20. East do do 3, 4, 5 and 6, Ranges 21 and 23. East do do 7, 8, 9 and 10 do 27, 29, 31 and 33. East do do 8, Range 26. North and east boundary of Township 7, Range 25. South boundary of Township 3, Ranges 17 to 24. North do do 6 do 17 to 24. North do do 10 do 27 to 34. South do do 7 do 24 to 34. South do do 1 do 33 and 34. North do do 8 do 24 to 34. North do do 2 do 33 and 34. (All west of Principal Meridian.) 2nd Meridian Township, 1 to 6. do do 37 and 38.



**SCHEDULE (No. 11) showing Surveyors employed and Work performed by each,  
during the year 1880—Continued.**

Name.	Residence.	Description of Work performed.
Pearce, Wm . . .	Winnipeg, Man. . .	Sub-division part of Township 1, Ranges 6 and 7. Sub-division do 2 do 8. South boundary do 1 do 1 to 8. North do do 1 do 5 to 8. North do do 2 do 1 to 8. East do do 1 and 2, Ranges 5 to 9. (All west of 2nd Initial Meridian.)
Ryley, G. U. . . .	Ottawa, Ont. . . .	South boundary Township 3, Ranges 27 and 28. (West of Principal Meridian.)
Reid, J. L. . . . .	Port Hope, Ont. . .	Sub-division of Townships 44 and 45, Range 21. Sub-division do 27 to 30 do 15. North boundary Township 45, Range 21. North do do 29 do 15. Part east boundary Township 44, Range 21. East and west boundary Township 45, Range 21. South boundary Township 28, Range 15. (All west of 2nd Initial Meridian.)
Rainboth, G. C. . .	Aylmer, Que. . . . .	North boundary Township 27, Ranges 1, 2, 3, 4 and 5. North do do 29 do 1, 2 and 3. East do do 27, 28 and 29, Range 4. East do do 27, 28, 29 and 30, Ranges 2 and 3. East do do 27, Range 6. (All west of 2nd Initial Meridian.)
Reiffenstein, J. H.	Ottawa, Ont. . . . .	Sub-division of Townships 21 and 22, Ranges 27 and 28. North boundary do 21, Ranges 27 and 28. East do do 21 and 22, Range 28. (All west of Principal Meridian.)
Russell, A. L. . . .	Port Arthur, Ont. . .	North boundary Township 30, Ranges 1 to 12. North do do 34 do 13 to 23. North do do 26 do 1 to 4. South do do 31 do 1 to 12. South do do 35 do 13 to 23. South do do 27 do 1 to 4. East do do 27 to 30, Range 5. East do do 33 and 34, Ranges 9 and 13. East do do 35 and 36 do 21. (All west of 2nd Initial Meridian.)
Sinclair, Dum. . . .	Winnipeg, Man. . . .	Sub-division of Townships 3 and 4, Ranges 19 and 20. do do 3 and 4 do 25 and 26. North boundary do 3, Ranges 19 and 20. East do do 3 and 4, Range 20. North do do 3, Ranges 25 and 26. East do do 3 and 4, Range 26. (All west of Principal Meridian.)
Staunton & Jones.	Hamilton, Ont. . . .	Sub-division of Township 17, Ranges 31 and 33. North boundary do 17 do 31 and 33. (All west of Principal Meridian.)
Stuart, Geo. . . . .	Winnipeg, Man. . . .	Sub-division of Township 19, Ranges 19 and 20. North boundary do 19, Range 20. West do do 19 do 19. (All west of Principal Meridian.)
Snow, J. A. . . . .	Ottawa, Ont. . . . .	Sub-division of Township 19, Ranges 23, 24 and 25. do do 20 do 24 and 25. North boundary do 19 do 23, 24 and 25. East do do 20 do 24. West do do 19 do 23. (All west of Principal Meridian.)
Stewart, J. . . . .	Moosomin, Ass. . . .	Sub-division of Townships 23 and 24, Ranges 31 and 32. do do 15 and 16 do 29 and 30. North boundary do 23, Ranges 31 and 32. East do do 23 and 24, Range 32. North do do 15, Ranges 29 and 30. East do do 15 and 16, Range 30. (All west of Principal Meridian.)
Thompson, W. T. .	Cannington, Ont. . .	East boundary Townships 19 to 22, Ranges 5, 9 and 13. North do do 19A, Ranges 1 to 12. North do do 20 do 13. North do do 22 do 5 to 8. (All west of 2nd Initial Meridian.)

SCHEDULE (No. 11) showing Surveyors employed and Work performed by each, during the year 1880—*Concluded.*

Name.	Residence.	Description of Work Performed.
Thomson, A. C. ....		Sub-division of Townships 19 and 20, Range 22. do do 20, Range 21. West boundary do 20 do 21. South do do 19 and 20, Range 22. East do do 19, Range 22. (All west of Principal Meridian.)
Unwin, C. ....	Toronto, Ont. ....	Sub-division of Township 18, Range 16. South boundary do 18 do 16. (All west of Principal Meridian.)
Wagner, Wm. ....	Ossowa, Man. ....	Sub-division of Townships 7 and 8, Ranges 19 and 20. Sub do do 7 and 8 do 27 and 28. North boundary do 7, Ranges 19 and 20. East do do 7 and 8, Range 20. North do do 7, Ranges 27 and 28. East do do 7 and 8, Range 28. (All west of Principal Meridian.)
Webb, A. C. ....	Brighton, Ont. ....	South boundary Township 11, Ranges 26 to 34. South do do 15 do 31, 32 and 33. North do do 12 and 14, Ranges 27 to 34. North do do 18, Ranges 31, 32 and 33. East do do 13 to 18, Range 33. East do do 11 and 12 Ranges 27 and 33. East do do 11 to 14 do 29 and 31. (All west of Principal Meridian.)

SCHEDULE (No. 12) showing Surveyors employed and Work performed by each, during the Year 1881.

Aldous, M. . . .	Winnipeg, Man. . . .	East boundary, Townships 1 to 16, Range 25. East do do 5 to 8, do 29. North do do 4, 8, 12 and 16, Ranges 25 to 28. North do do 12 and 16, do 29 and 30. (All west of 4th Initial Meridian.) East boundary Townships 17 to 22, Range 3. East do do 23 do 4. East do do 24 do 5. North do do 16 and 20, Ranges 1 and 2. North do do 23, Range 4. North do do 24, Ranges 1 to 4. South do do 23, Range 3. (All west of 5th Initial Meridian.)
Armstrong, F. W.	Orillia, Ont. . . .	Sub-division Townships 23 and 24, Range 29. do do 18, Ranges 27 and 28. do do 23, Range 30. do do 13 and 14, Ranges 31 and 32. North boundary Township 23, Ranges 29 and 30. West do do 24, Range 29. East do do 18, do 28. East do do 23 do 30. (All west of Principal Meridian.) North and west boundary Township 13 and 14, Ranges 9 and 10. (All west of 2nd Initial Meridian.)
Abrey, G. B. . . .	Little Current, Ont	Sub-division Townships 15 and 16, Ranges 32 and 33. do do 5 and 6 do 33 and 34. do do 3 and 4 do 33 and 34. do do 7 and 8 do 33 and 34. East boundary Township 15, Range 32. South do do 16, Ranges 32 and 33. South do do 6 do 33 and 34. North do do 3 do 33 and 34. West do do 5, Range 33. East do Townships 3, 4 and 6, Range 34. East do do 7 and 8, Range 34. (All west of Principal Meridian.)

**SCHEDULE (No. 12) showing Surveyors employed and Work performed by each during the Year 1881—Continued.**

Name.	Residence.	Description of Work performed.
Burnett, P. . . . .	Orillia, Ont. . . . .	Sub-division Township 4, Ranges 1 to 10. (West of 2nd Initial Meridian.)
Beatty, W. & D. . . . .	Delta, Ont. . . . .	Sub-division Townships 18 and 19A, Ranges 2, 5, 7 and 9. do do 19A, Ranges 1, 10, 3 and 4. do do 18 do 1, 6, 8 and 10. do do 19 do 26 and 33. do do 20 do 26 and 33. Part of sub-division Township 18, Ranges 3 and 4 North boundary Township 19A, Ranges 7, 9 and 10. North do do 19 do 26 and 33. (All west of 2nd Initial Meridian.)
Belanger, P. R. A. . . . .	L'Islet, Que . . . . .	Sub-division Townships 9 and 10, Ranges 29 and 30. do do 9, Ranges 33 and 34. East boundary do 9, Range 34. (All west of Principal Meridian.) North boundary Township 9, Ranges 4 and 5. (All west of 2nd Initial Meridian.)
Burchill & Davis. . . . .		Sub-division Township 15, Ranges 1 to 10. (All west of 2nd Initial Meridian.)
Burrows, J. J. . . . .	Ottawa, Ont . . . . .	Sub-division Township 24, Ranges 2 to 9. South boundary Township 24, Ranges 7 and 9. (All west of 2nd Initial Meridian.)
Breen, T. . . . .	L'Islet, Que. . . . .	Sub-division Township 9, Range 17. Sub-division Townships 9 and 10, Ranges 31 and 32. Sub-division Township 8, Range 31. North boundary Township 9, Range 17. (All west of Principal Meridian.)
Brodie, S. . . . .	Toronto, Ont. . . . .	Sub-division Township 7, Ranges 1 to 10.) (West of 2nd Initial Meridian.)
Brabazon, S. L. . . . .	Portage du Fort, Que.	Sub-division Township 16, Ranges 1 to 10. (West of 2nd Initial Meridian.)
Bray, Edgar . . . . .	Oakville, Ont. . . . .	North boundary Township 24, Ranges 13 to 29. East boundary Townships 23 to 26, Ranges 17, 21, 25 and 29. (All west of 2nd Initial Meridian.) North boundary Township 24, Ranges 1 to 5. East do Townships 23 to 26, Range 5. (All west of 3rd Initial Meridian.)
Carbert, J. . . . .	Orangeville, Ont. . . . .	Sub-division Township 3, Ranges 1 to 10. (West of 2nd Initial Meridian.) Sub-division Township 2, Range 23. (West of Principal Meridian.)
Caddy, E. C. . . . .	Cobourg, Ont. . . . .	Sub-division Townships 11 and 12, Ranges 29 and 30. North boundary Township 11, Ranges 29 and 30. East do Townships 11 and 12, Range 30. (All west of Principal Meridian.) Sub-division Township 12 Ranges 1 to 8. (West of 2nd Initial Meridian.)
Clementi & Hewson	Peterboro', Ont. . . . .	Subdivision Township 21, Ranges 13 to 18. Subdivision do 21 do 20 and 21. (All west of 2nd Initial Meridian.)
Cotton, A. F. . . . .	Ottawa, Ont. . . . .	East boundary Township 13, Ranges 1, 2 and 3. East do 13 do 6, 7 and 8. East do 13 and 16 Range 14. East do 14, Ranges 1, 2, 3 and 4. East do 14 do 6, 7 and 8. East do 14 do 14. North boundary Township 13, Ranges 1 to 8. North do 13, Range 13. North do 14, Ranges 2, 5, 6, 7, 8 and 13. North and west boundary Township 15, Range 13. South do do 15 do 5, 6 and 7. (All west of 2nd Initial Meridian.)



SCHEDULE (No. 12) showing Surveyors employed and Work performed by each, during the Year 1881—*Continued.*

Name.	Residence.	Description of Work performed.
Carre, H . . . . .	Brockville, Ont. . .	North boundary Township 21 and 22, Ranges 18 19, 20. North do do 23 do 18, 19, 20. North do do 21 and 22 do 17. North do do 23 do 17. North do do 25 do 13 to 16. North do do 26 do 13 to 15. North do do 27A do 13 to 15. East do do 21, 22 and 23 do 18 to 20. East do do 24 do 18 to 20. East do do 25 do 13 to 16. East do do 26 do 13 to 16. East do do 27A do 13 to 15. (All west of 2nd Initial Meridian.)
Dawson, E. C. . . . .	New Glasgow, N.S.	Subdivision Township 17, Ranges 1, 2, 6, 7, 8, 9 and 10. (All west of 2nd Initial Meridian.)
Drummond, T. . . . .	Montreal . . . . .	North boundary Township 23, 24, 25, Ranges 1, 2. East do do 23, 24, 25, 26, Range 2. East do do 23, Range 3. (All west of 2nd Initial Meridian.)
Deane, M . . . . .	Lindsay, Ont. . . . .	3rd Initial Meridian, Township 1 to 36. Subdivision Township 25, Ranges 29 and 30. North boundary Township 25, Ranges 29 and 30. East do do 25 do 30. (All west of Principal Meridian.)
Doupe, Jos. . . . .	Winnipeg, Man. . . .	Subdivision Township 10, Range 17. Subdivision do 13 do 29 and 30. Subdivision do 11 do 31 and 32. North boundary Township 13, Range 30. East do do 13 do 30. (All west of Principal Meridian.)
Evans & Bolger . . . .	Belleville, Ont. . . .	Subdivision Township 7 and 8, Ranges 23 to 26. North boundary Township 7 do 23 and 24. North do do 7 do 26. East do do 7 and 8, Range 24. East do do 8 do 25. East do do 7 do 26. (All west of Principal Meridian.)
Forrest, A. G. . . . .		Survey of Manitoba Highway.
Fawcett, Thos. . . . .	Gravenhurst, Ont.	North boundary Township 5 and 6, Ranges 1 to 8 and 13 to 15. North do do 7 do 5 to 8 and 13 and 14. East do do 5 and 6 do 2, 3, 4, 6, 7 and 8. East do do 5 and 6 do 14 and 15. East do do 7 and 8 do 6 to 8 and 14 and 15. (All west of 2nd Initial Meridian.)
Garden, J. F . . . . .	Toronto, Ont. . . . .	East boundary Township 21 and 23, Ranges 13 to 16 and 22 and 23. East do do 22 do 13 to 16 and 22. East do do 24 do 13 to 16 and 22 to 24. North do do 21, 22 and 23 do 13 to 16. North do do 21 do 21 and 22. North do do 22 do 21. North do do 23 do 21, 22 and 23. (All west of 2nd Initial Meridian.)
Garon, L. J. . . . .		Subdivision of Township 10, Ranges 1 to 9. (All west of 2nd Initial Meridian.)
Gore, T. S. . . . .	Gore's Landing, O.	East boundary of Township 1, Ranges 2, 3, 4 and 10, 11 and 12. East do do 2 do 2 to 4 and 10 to 12. East do do 3 and 4, Ranges 1 to 4, 6 to 8. East do do 3 and 4, do 10 to 12. North do do 1 do 1 to 4 and 9 to 12. North do do 3 do 1 to 12. South do do 3 do 1 to 12. (All west of 2nd Initial Meridian.)
Hamel, A . . . . .	Emerson, Man. . . . .	Subdivision of Township 14, Ranges 1 to 5. (All west of 2nd Initial Meridian.)
Hart, M. . . . .	St. Mary, Ont. . . . .	East boundary Township 9 and 10, Ranges 1 to 4. North do do 9 and 10 do 1 to 4. South do do 11 do 1 to 4. (All west of 2nd Initial Meridian.)

SCHEDULE (No. 12) showing Surveyors employed and Work performed by each, during the year 1881—*Continued.*

Name.	Residence.	Description of Work performed.
Hill, John.....	Rimouski, Que....	Subdivision Township 22, Ranges 1 and 2. Subdivision do 25, do 5 to 9. (All west of 2nd Initial Meridian.)
Kennedy, L.....	Winnipeg, Man...	North boundary Township 19, 21, 22, 23, Ranges 1 and 2. East do do 19 to 24 do 2. East do do 23 and 24 do 3. South and west boundary Township 24 do 3. (All west of 5th Initial Meridian.)
Kains, Tom.....	St. Thomas, Ont..	East boundary Township 17, Ranges 2, 3, 6, 7, 8, 14 to 16. East do do 18 do 3, 4, 6, 7, 8, 14, 15 and 16. East do do 19A do 3 to 8. East do do 19 and 20, Ranges 13, 14 and 15. North do do 17, Ranges 2, 5, 6, 7, 8, 13, 14, 15 and 16. North do do 18 do 2 to 8 and 13 and 14. North do do 19 do 13 and 14. (All west of 2nd Initial Meridian.)
Kerr, Henry.....	Annapolis, N.S..	Subdivision Townships 3, 4, 5 and 6, Ranges 31 and 32. East boundary Townships 3, 4, 5 and 6, Range 32. South do do 4 and 6, Range 32. North do do 3 and 5 do 31. (All west of Principal Meridian.)
Klotz, O. J.....	Preston, Ont.....	East boundary Townships 7 to 10, Ranges 5, 9, 13, 17, 21 and 25. North do do 8, Ranges 1 to 24. (All west of 2nd Initial Meridian.)
Miles, C. F. ....	Toronto, Ont.....	East boundary Townships 19, 20 and parts of 21 and 22, Range 4. East do do 19, 20, 21 and 22, Ranges 6, 7 and 8. East do do 20, 21 and 22, Range 11. East do do 20, 21 and 22 do 10. East do do 19 do 10 and 11. Part east do do 21 do 12. North do do 19, 20 and 21 do 4, 5 and 8. North do do 19 do 3 and 7. North do do 19 do 9 and 10. North do do 21 do 6. North do do 19 and 20 do 6. North do do 20 and 21 do 7, 9, 10 and 11. North do do 20 do 12. (All west of 2nd Initial Meridian.)
Morris, J.....	Perth, Ont.....	Subdivision Township 1, Ranges 13 and 14. Subdivision do 3 and 4, Ranges 23 and 24. Subdivision do 3, Range 17. East boundary Township 1, Range 14. South do do 1 do 13 and 14. North do do 3 do 23 and 24. East do do 3 and 4, Range 24. (All west of Principal Meridian.)
McKenna, J.....	Dublin, Ont....	Subdivision Township 27, Ranges 3 to 7. (West of 2nd Initial Meridian.)
McAree, J.....	Toronto, Ont.....	Subdivision Township 11, Ranges 1 to 5. (West of 2nd Initial Meridian.)
McMillan, J.....	London, Ont.....	Subdivision Township 9, Ranges 1, 2, 5, 6 and 7. (West of 2nd Initial Meridian.)
McPhillips, R. C..	Winnipeg, Man...	Subdivision Township 19, Ranges 3, 4, 5, 6, 8, 9 and 10. (West of 2nd Initial Meridian.)
McArthur, J. J...	Aylmer, Que.....	Subdivision Township 25, Range 31. Subdivision do 25 and 26, Ranges 32 and 33. North boundary Township 25, Range 31. North do do 25 do 32 and 33. East do do 25 do 32 and 33. East do do 26 do 32 and 33. (All west of Principal Meridian.)
McArthur, J.....	do.....	Subdivision Townships 1 and 2, Ranges 33 and 34. Subdivision do 3 and 4 do 29 and 30. North boundary Township 3 do 29 and 30. East do do 3 and 4, Range 30. (All west of Principal Meridian.)

SCHEDULE (No. 12) showing Surveyors employed and Work performed by each, during the year 1881—*Continued.*

Name.	Residence.	Description of Work performed.
McLatchie, J. ....	Ottawa, Ont. ....	Subdivision Township 9, Range 22. (East of Principal Meridian.) East boundary Townships 1 to 6, Ranges 9, 13, 17, 21, 25 and 27. East do 3 to 6 do 5 and 9. South do 1 do 9 to 30. North do 4 do 1 to 30. (All west of 2nd Initial Meridian.)
O'Hanly, J. L. P..	do .....	West boundary of Manitoba from Townships 29 to 36, Range 30, west of Principal Meridian.
O'Keeffe, D. C. ...	Hamilton, Ont. ....	Subdivision Township 26, Ranges 29 and 30. East boundary Township 26, Range 30. (All west of Principal Meridian.) Subdivision Township 6, Ranges 1 to 10. (All west of 2nd Initial Meridian.)
Ogilvie, Wm. ....	Ottawa, Ont. ....	4th Initial Meridian from International Boundary to north of Township 40.
Pearce, Wm. ....	Calgary, Alberta..	East boundary Township 15 to 18, Ranges 5, 9, 13, 17 and 21. East do 15 to 18 do 25 and 29. East do 17 to 20 do 22, 23 and 24. North do 16 do 1 to 30. North do 17 do 21 to 24. North do 18 and 19 do 21 to 24. South do 19 do 21 to 24. (All west of 2nd Initial Meridian.)
Poudrier, A. L. ....	.....	Subdivision Township 2, Ranges 1 to 6 and 8, all west of 2nd Initial Meridian.
Reid, J. L. ....	Port Hope, Ont. ...	Sub-division of Township 28, Range 13. Sub-division do 27 do 14. East boundary of Township 23, Ranges 6, 7, 8, 10 and 11. East do do 24 do 6, 7, 8, 10 and 11. North do do 23 do 5, 6 and 8. North do do 24 do 9 to 12. East do do 25 and 26, Ranges 10 and 11. (All west of 2nd Initial Meridian.)
Rainboth, G. C. ...	Aylmer, Que. ....	East boundary of Townships 27 and 30, Ranges 7 and 8. East do do 28, Ranges 6 to 9. East do do 29 do 6, 7 and 8. North do do 27 and 29, Ranges 6, 7 and 8. (All west of 2nd Initial Meridian.)
Reiffenstein & Small.	Ottawa, Ont. ....	Sub-division of Township 26, Ranges 9 and 10. (West of 2nd Initial Meridian.)
Reiffenstein, J. ....	Ottawa, Ont. ....	Sub-division of Townships 21 and 22, Range 26. North boundary do 21, Range 26. East do do 21 and 22, Range 26. (All west of Principal Meridian.) Sub-division of Township 26, Ranges 5, 6, 7 and 8. South boundary do 26 do 6. (All west of 2nd Initial Meridian.)
Ryley, G. U. ....	Ottawa, Ont. ....	East boundary of Townships 17, 18 and 19A, Range 2. East do do 17 and 19A, Range 4. East do do 17, Ranges 10, 11, 12, 18 and 19. East do do 18 do 10, 11, 12 and 18. East do do 19A do 10 to 13. East do do 20 do 18. North do do 17 and 18, Range 1. North do do 17, Ranges 9 to 12 and 17 and 18. North do do 18 do 9 to 12 and 17. North and west boundary of Township 19, Range 17. South boundary of Township 19, Range 17. South do do 19A do 12. (All west of 2nd Initial Meridian.) 2nd Initial Meridian, Townships 17, 18, 19A.



SCHEDULE (No. 12) showing Surveyors employed and Work performed by each,  
during the year 1881—*Continued.*

Name.	Residence.	Description of Work performed.
Sing J. G. ....	Stratford, Ont. . .	East boundary of Township 9, Ranges 6 to 8. East do do 12 do 1 to 4 and 6 to 8 and 14 and 15. East do do 10 do 8. East do do 11 do 1 to 4 and 6 to 8 and 14 and 15. North do do 9 do 7 and 8. North do do 11 do 1 to 8 and 13 and 14. North do do 10 do 1, 5, 6, 7 and 8. (All west of 2nd Initial Meridian.)
Snow, J. A. ....	Ottawa, Ont. ....	Sub-division of Township 21, Ranges, 24 and 25. Sub-division do 20 do 23. North boundary of Township 21, Ranges 24 and 25. East do do 21 do 24. (All west of Principal Meridian.) Sub-division of Townships 25 and 26, Ranges 13 to 16. Sub-division do 27 A, Ranges 13, 14 and 15. East boundary of Township 27 A do 13. West do do 27 A do 15. West do do 26 do 15 I. R. (All west of 2nd Initial Meridian.)
Staunton & Jones.	Hamilton, Ont. . .	Sub-division of Township 14, Ranges 33 and 34. Sub-division do 17 and 18, Ranges 32 and 33. Sub-division do 18, Range 31. Sub-division do 25 and 26, Range 27. Sub-division do 26, Range 28. East boundary of Township 14, Range 34. North and east boundary of Township 17, Range 32. North boundary of Township 25, Range 27. East do do 26 do 28. East do do 18 do 32. (All west of Principal Meridian.)
Stewart, J. ....	Banff, Alb. ....	Sub-division of Township 8, Ranges 1 to 10. (West of 2nd Initial Meridian.)
Sinclair & Francis.	Winnipeg, Man. . .	Sub-division of Township 1, Ranges 1 to 9. Sub-division do 1 and 2, Range 10. Sub-division do 2, Range 9. North boundary of Township 1, Ranges 9 and 10. East do do 1 do 10 and 11. (All west of 2nd Initial Meridian.)
Thomson, A. C. ....		East boundary of Townships 13 and 14, Range 12. East do do 15 and 16 do 1 to 4 and 6 to 8. East do do 15 and 16 do 10 to 12. North do do 13, Ranges 11 and 12. North do do 14 do 2 to 4 and 11 and 12. North do do 15 do 1 to 12. South do do 15 do 1. (All west of 2nd Initial Meridian.)
Thompson, W. T. .	Cannington, Ont. .	North boundary of Township 20, Ranges 13 to 29. East do do 19 to 22, Ranges 17, 21, 25 and 29. East do do 27 to 30 do 21, 25 and 29. North do do 28, Ranges 17 to 29. (All west of 2nd Initial Meridian.)
Traynor, I. ....	Dundalk, Ont. ....	Sub-division of Township 28, Ranges 3, 6 and 7. Part of sub-division of Township 28, Range 8. (West of 2nd Initial Meridian.)
Unwin, C. ....	Toronto, Ont. ....	Sub-division of Township 18, Range 18. South boundary do 18 do 18. (West of Principal Meridian.)
Webb, A. C. ....	Brighton, Ont. ....	North boundary of Township 12, Ranges 1 to 28. North do 11 do 28. East do 11 to 14 do 5, 9, 13, 17, 21 & 25. East do 12 and 13 do 28. East do 11 and 12 do 29. East do 14 do 29. South do 12 do 29 and 30. North do 13 do 28. (All west of 2nd Initial Meridian.)

SCHEDULE (No. 12) showing Surveyors employed and Work performed by each, during the year 1881—*Concluded*.

Name.	Residence.	Description of Work performed.
Walsh, T. W. ....		Sub-division of Township 20, Ranges 3 to 7. (West of 2nd Initial Meridian.)
Warren, J. ....	Kincardine, Ont..	Sub-division of Township 5, Ranges 1 to 7. (West of 2nd Initial Meridian.)
Wilson, H. ....		Sub-division of Township 21, Ranges 3 to 10. Sub-division do 22 do 3. (All West of 2nd Initial Meridian.)
Wolff, C. E. ....	Ottawa, Ont. ....	North boundary of Township 5, Ranges 9, to 12, and 17 and 18. North do 7 do 1 to 4, and 9 to 12. East do 6 do 10, 11, 12 and 19. East do 5 do 10, 11, 12 and 19. East do 7 and 8 do 1 to 4, and 10, 11 & 12. East do 5 to 8 do 18. South do 6 do 9 to 12. South do 7 do 17. North do 8 do 17. (All west of 2nd Initial Meridian.)
Wilson, R. A. ....	Mount Forest, Ont.	Sub-division of Township 22, Ranges 4 to 10. (West of 2nd Initial Meridian.)
Wagner, Wm. ....	Ossowa, Man. ....	Sub-division of Townships 11 and 12, Range 28. Sub-division do 11 and 12 do 26 and 27. Sub-division do 11 do 25. North boundary do 11 do 26, 27 and 28. East do do 11 and 12 do 26 and 28. (All west of Principal Meridian.)
Wilkins, F. W. ....	Norwood, Ont. ....	Sub-division of Townships 5, 6, 7 and 8, Ranges 29 and 30. North boundary do 5 do 29 and 30. East do do 5 and 6 do 30. (All west of Principal Meridian.)

SCHEDULE (No. 13) showing Surveyors employed and Work performed by each, during the year 1882.

Abrey, G. B. ....	Little Current, O.	Eleventh base line from the 3rd to the 4th I.M. ; the 4th I.M. from the 14th to the 15th base line, and the 15th base line from the 4th I.M. westward.
Armstrong, F. W.	Orillia, Ont. ....	Township outlines, between the 3rd and 4th base lines, from Range 9 to 12 west of the 2nd I.M., and between the 4th and 5th base lines, west of the 4th I.M.
Ashe, W.A., D.T.S	Quebec	Tenth base line, from the 3rd to the 4th I.M.; reposting of the 4th I.M., from the 11th to the 14th base line, and the 14th base line west of the 4th I.M.
Bazette, Ed. ....	Orillia, Ont. ....	Townships 21 and 24, Range 19; Townships 22 and 23, Ranges 19 and 20; Township 25, Ranges 22 to 24 west of 2nd I.M.
Beatty, D. ....	Delta, Ont. ....	Townships 54 to 56, Range 22; Townships 56 and 57, Ranges 23 and 24, west of the 4th I.M. and Township outlines; also standard Meridians in Townships 55 to 57, between Ranges 24 and 25 and between Ranges 22 and 23 west of 4th I.M.
Beatty, W. ....	do	Township 52, Ranges 23 to 27; Township 53, Ranges 25 to 27; Township 54, Range 26 west of 4th I.M. and Township outlines.
Bélanger, P. R. A.	L'Islet, Que. ....	Township outlines, between the 3rd and 4th base lines, Ranges 17 to 20 west of 2nd I.M.; between the 2nd and 3rd base lines, Ranges 17 and 18 west of 2nd I.M., and between the 4th and 5th base lines west of 4th I.M.
Bell, Wm. ....	Pembroke, Ont. ....	Township outlines, between the 6th and 7th base lines, Range 25 west of 2nd I.M. to the 3rd I.M., and between the 5th and 6th base lines west of the 4th I.M.
Bigger, C. A. ....	Plantagenet, Ont..	Eleventh base line, from the 3rd I.M. eastward across Ranges 29 and 28; the 12th base line from the Meridian between Ranges 3 and 4 west of 3rd I.M. across Ranges 4 and 5, and Township outlines, between the 10th and 11th base lines west of 2nd I.M.

**SCHEDULE (No. 13) showing Surveyors employed and Work performed by each,  
during the year 1882—Continued.**

Name.	Residence.	Description of Work performed.
Bignell, John...	Quebec .....	Township outlines, between the 7th and 8th base lines, Ranges 25 to 28 west of 2nd I.M., and between the 5th and 6th base lines west of 4th I.M.
Bolton, Lewis ...	Listowell, Ont. ....	Township outlines, between the 5th and 6th base lines in Range 16; between the 4th and 5th base lines, Range 21 to 24 west of 2nd I.M., and between the 5th and 6th base lines west of 3rd I.M.
Bourgeois, J. ....	Three Rivers, Que.	Townships 19 and 20, Ranges 11 and 12; Township 15, Range 18, and Township 14, Range 19 west of 2nd I.M.
Brabazon, S. L. ....	Portage du Fort, Q.	Township 6, Ranges 25 and 28; Township 7, Ranges 31 and 32 west of 1st P.M.; Township 9, Range 20; Township 10, Ranges 10 to 16, and Ranges 18 to 20; Township 11, Ranges 9, 10, 19, 20 and 22 west of 2nd I.M.
Bray, Edgar. ....	Oakville, Ont. ....	Sixth base line and Meridians transverse thereto, west of 3rd I.M.
Bray, H. F. ....	do .....	Townships 33 to 36, Ranges 4 and 5 west of 3rd I.M. and Township outlines.
Brodie, S. ....	Toronto, Ont. ....	Township 23, Ranges 11 and 12; Township 24, Range 12 west of 2nd I.M.
Brunelle, F. E. ....	Three Rivers, Que.	Townships 19 and 20, Range 10; Townships 19a and 18, Range 11; Township 15, Range 19; Townships 14 and 15, Range 20 west of 2nd I.M.
Burnet, Peter ....	Orillia, Ont. ....	Township 5, Ranges 7 to 12; Townships 10 and 11, Range 17; Township 11, Range 18; Townships 12 and 13, Range 19 west of 2nd I.M.
Burrows, J. J. ....	Ottawa, Ont. ....	Townships 25 and 26, Ranges 11 and 12; Township 28, Ranges 17 and 18 west of the 2nd I.M.
Byrne, Thos. ....	Sarnia, Ont. ....	Townships 33 to 36, Ranges 1 and 2, west of 3rd I.M. and Township outline.
Caddy, E. C. ....	Cobourg, Ont. ....	Townships 45 to 49, Range 23; Townships 46 to 49, Range 22, west of 2nd I.M. and Township outlines.
Carroll, Cyrus ....	Port Elgin, Ont. ....	Township 41, Ranges 1 to 3; Townships 42 A, Range 1, Township 40, Range 5, west of 3rd I.M. and Township outlines.
Cavana, A.G. ....	Brechin, Ont. ....	Third I.M. from North Saskatchewan to 13th base line; 13th base line, westward across seven ranges, and 12th base line from 4th I.M., eastward.
Cotton, A. F. ....	Ottawa, Ont. ....	Township outlines between the 4th and 5th base lines, Ranges 17 to 20, west of 2nd I.M., between the 5th and 6th base lines, Range 29, west of 2nd I.M., to 3rd I.M. and between the 6th and 7th base lines, west of 4th I.M.
Dalton, J.J., D.T.S	Yorkville, Ont. ....	Township 8, Range 32; Townships 10 and 11, Ranges 33 and 34; Township 12, Range 31, west of 1st P.M., and Township 12, Ranges 9 and 10, west of 2nd I.M.
D'Amours, J. W. ....	Quebec. ....	Township 18, Ranges 20 and 21; Townships 19 and 20, Ranges 19 to 24, west of 2nd I.M.
Deane, M. ....	Lindsay, Ont. ....	Settlement survey at Edmonton, on the River Saskatchewan.
Denny, H. C. ....	Ottawa, Ont. ....	Township outlines between the 7th and 8th base lines, from Range 25, west of 2nd I.M. to 3rd I.M. and between the 5th and 6th bases, west of 4th I.M.
Desjardins, C. ....	do .....	Township outlines between 4th and 5th base lines, Ranges 17 to 20, west of 2nd I.M. and between 6th and 7th base lines, west of 4th I.M.
Desmeules, J. C. ....	Murray Bay, Que.	Ninth base line from 3rd I.M., eastward, and Township outlines between 8th and 9th base lines, west of 2nd I.M.
Doupe, Jos. ....	Winnipeg, Man. .	Townships 49 to 53, Ranges 1 and 2, west of 4th I.M. and Township outlines.
Drummond, Thos. ....	Montreal, Que. ....	Sixth base line and meridians transverse thereto, west of 4th I.M.
Duburger, C. C. ....	Murray Bay, Que.	Township 17, Ranges 11 to 15; Townships 17 to 20, Ranges 25 to 27; Townships 18 and 19 A, Range 12; Township 24, Ranges 23 to 27; Township 24, Ranges 24 to 26, west of 2nd I.M.
Dudderidge, Jas. ....	Lachute, Que. ....	Township outlines between 4th and 5th base lines, from Range 29, west of 2nd I.M. to the 3rd I.M. and between the 5th and 6th base lines, west of 3rd I.M.
Dumais, H. ....	Chicoutimi, Que. .	Reposting of the 2nd I.M., from 9th base line to the 8th correction line and 9th base line, westward across two ranges; also Townships 32 and 33, Range 3; Townships 31 and 32, Ranges 4 and 5, west of 2nd I.M. and Township outlines.



SCHEDULE (No. 13) showing Surveyors employed and Work performed by each, during the year 1882—*Continued.*

Name.	Residence.	Description of Work performed.
Dumais, P. T. C. . . .	Chicoutimi, Que. . .	Township 11, Ranges 6 to 11; Township 12, Ranges 9 to 11; Township 13, Ranges 7 to 11; Township 14, Ranges 7 to 10, west of 2nd I.M.
Dupuis, Z. C. . . . .	Montmagny, Que. . .	Townships 18 and 19, Range 13; Townships 18 to 21, Range 14; Township 22, Range 21; Townships 21 to 23, Range 22, and Townships 22 and 23, Range 23, west of 2nd I.M.
Ellis, H. D. . . . .	London, Ont. . . . .	Thirteenth base line, from meridian, between Ranges 24 A and 24 west of 2nd I.M., eastward across 24 A, 23 and 22; 12th base line, eastward; also Township outlines between the 12th and 13th base lines.
Fafard, Eug. . . . .	L'Islet, Que. . . . .	Township 5, Ranges 14 to 18; Township 6, Ranges 14 to 16; Township 11, Range 21; Township 12, Ranges 20 to 22; Township 13, Range 20, west of 2nd I.M.
Fawcett, T., D.T.S.	Gravenhurst, Ont.	Fifth base line and meridians transverse thereto, west of 3rd I.M.
Fitton, C. E. . . . .	Orillia, Ont. . . . .	Townships 22 to 24, Ranges 17 and 18; Township 26, Ranges 22 to 24, west of 2nd I.M.
Francis, J. J. . . . .	Sarnia, Ont. . . . .	Township 12, Ranges 32 to 34; Township 13, Ranges 33 and 34, west of 1st P.M.; Township 13, Range 1 and Township 16, Ranges 14 to 20, west of 2nd I.M.
Garden, J. F. . . . .	Toronto, Ont. . . . .	Township outlines, between 6th and 7th base lines, Ranges 21 to 24; between 7th and 8th base lines, Ranges 21 to 24, west of 2nd I.M.; and between 6th and 7th base lines, west of 3rd I.M.
Gauvreau, L. P. . . . .	Quebec . . . . .	Townships 1 to 3, Ranges 11 and 12; Township 9, Range 18, west of 2nd I.M.
Gore, T. S. . . . .	Regina, N.W.T.	Township 17, Ranges 19 and 20, west of 2nd I.M.
Hamel, Alfred. . . . .	Emerson, Man. . . . .	Township 18, Ranges 4 to 8, and Range 18; Township 20, Ranges 8 and 18; Townships 22 to 24, Ranges 13 and 14, west of 2nd I.M.
Hart, Milner. . . . .	St. Marys, Ont. . . . .	Examination of contract surveys.
Henderson, E. D. . . . .	Hemison, Que. . . . .	Townships 6 to 8, Ranges 11 and 12; Township 13, Ranges 17 and 18, west of 2nd I.M.
Hermon, R. W. . . . .	Rednersville, Ont.	Examination of contract surveys.
Hewson, T. R. . . . .	Peterboro', Ont. . . .	Township outlines, between the 6th and 7th base lines, Ranges 21 to 24, west of 2nd I.M.; between the 7th and 8th base lines, Ranges 21 to 24, west of 2nd I.M.; and between the 6th and 7th base lines, west of the 3rd I.M.
Hill, John. . . . .	Rimouski, Que. . . . .	Township 13, Ranges 23 to 25; Township 14, Ranges 24 and 26; Township 15, Ranges 23, 24, 26 and 27; Township 16, Ranges 21 to 27; Township 17, Ranges 16 to 18, and Ranges 25 to 27; Township 18, Range 17, and Ranges 25 to 27; Townships 19 and 20, Range 17, west of 2nd I.M.
Jones, F., & Co. . . . .	Kemptville, Ont. . . .	Townships 25 and 26, Ranges 1 to 7; Townships 27 and 28, Ranges 1 to 8, west of 3rd I.M. and Township outlines.
Kains, Tom . . . . .	St. Thomas, Ont. . . .	Seventh base line, westward from Range 4, west of 3rd I.M. and Meridians transverse thereto; also 13th base line, west of 4th I.M.
Kerr, Hugh. . . . .	Annapolis, N.S. . . . .	Townships 13 and 14, Range 28; Townships 14 and 15, Range 25; Townships 17 and 18, Ranges 22 to 24, west of 2nd I.M.
Kirk, J. A. . . . .	Stratford, Ont. . . . .	Townships 41, 42 and 44, Ranges 27 and 28, west of 2nd I.M. and Township outlines.
Klotz, O.J., D.T.S.	Preston, Ont. . . . .	Fifth base line and Meridians transverse thereto, west of 4th I.M.
Lawe, Henry. . . . .	Brandon, Man. . . . .	Township 8, Ranges 16 and 17, west of 2nd I.M.
Leber, Hector . . . . .	St. Wenceslas, Que. . .	Townships 19 to 22, Ranges 28 and 29; Township 23, Range 21; Township 24, Ranges 20 to 23; Township 25, Ranges 25 and 26, west of 2nd I.M.
Lemoine, C. E. . . . .	St. Boniface, Man. . . .	Township 23, Ranges 7 to 9, west of 2nd I.M.
Lendrum, R. W. . . . .	Riceville, Ont. . . . .	Townships 28 to 30, Ranges 1 and 2, west of 2nd I.M. and Township outlines.
Maddock, J. A. . . . .	Norwood, Ont. . . . .	Township outlines, between the 3rd and 4th base lines, Ranges 9 to 12, and between the 4th and 5th base lines, west of 4th I.M.
Magrath, C. A., D. T.S.	Williamstown, Man.	Fourth base line and Meridians transverse thereto, west of 4th I.M.; 15th base line, eastward from Meridian between Ranges 24 and 25, west of 4th I.M.; also outlines of Township 52, Ranges 23 to 25, west of 3rd I.M.
Michaud, J. Ls. . . . .	Rimouski, Que. . . . .	Township 11, Ranges 12 to 16; Township 12, Range 12 and Ranges 15 to 18; Townships 21 and 22, Ranges 11 and 12, west of 2nd I.M.

SCHEDULE (No. 13) showing Surveyors employed and Work performed by each, during the Year 1882—*Continued*.

Name.	Residence.	Description of Work performed.
Miles, C. F. ....	Toronto, Ont. ....	Township outlines, between the 7th and 8th base lines, Ranges 17 to 20, west of 2nd I.M., and between the 6th and 7th base lines, west of 4th I.M.
Murphy, F. ....	Mount Forest, Ont.	Townships 45 and 46, Range 4; Township 45, Range 5, west of 3rd I.M. and Township outlines.
McArthur, J. ....	Aylmer, Que. ....	Township 23, Ranges 3 to 6; Townships 19 and 20, Ranges 15 and 16, west of 2nd I.M.
McArthur, J. J. ....	do ....	Township outlines, between the 3rd and 4th base lines, Ranges 21 to 24, and between the 4th and 5th base lines, west of 3rd I.M.
McKenna, J. J. ....	Perth, Ont. ....	Township 13, Ranges 2 to 6; Township 14, Ranges 6, 14 and 15; Township 15, Ranges 14 to 16, west of 2nd I.M.
McLean, J. K. ....	Mount Forest, Ont.	Township outlines, between 3rd and 4th base lines, Ranges 21 to 24 west of 2nd I.M., and between the 4th and 5th base lines west of 3rd I.M.
McMillan, J. A. ....	London, Ont. ....	Townships 16 to 18, Ranges 28 to 30, and Township 15, Range 28 west of 2nd I.M.
McVittie, A. W. ....	Barrie, Ont. ....	Township outlines, between the 7th and 8th base lines, Ranges 17 to 20 west of 2nd I.M., and between the 6th and 7th base lines west of 4th I.M.
Ogilvie, W. ....	Ottawa, Ont. ....	Seventh base line and Meridians transverse thereto west of 4th I.M.
O'Keeffe, D. C. ....	Hamilton, Ont. ....	Townships 29 to 32, Ranges 3 to 5; Townships 33 and 34, Range 3 west of 3rd I.M. and Township outlines.
Ord, L. R. ....	Ottawa, Ont. ....	Township outlines, between the 6th and 7th base lines, Range 25 west of 2nd I.M. to 3rd I.M., and between the 5th and 6th base lines west of 4th I.M.
Patrick, L. ....	Portage la Prairie, Man.	Township 48, Range 1; and Townships 45 to 48, Ranges 2 and 3 west of 3rd I.M., and Township outlines.
Proudfoot, H. B. ....	Ottawa, Ont. ....	Township outlines, between the 5th and 6th base lines, Ranges 13 to 16; between the 4th and 5th base lines, Ranges 21 to 24 west of 2nd I.M., and between the 5th and 6th base lines west of 3rd I.M.
Rainboth, E. J. ....	Aylmer, Que. ....	Township outlines, between the 5th and 6th base lines, Ranges 17 to 20; and Ranges 25 to 28 west of 2nd I.M.; also between the 6th and 7th base lines west of 3rd I.M.
Rainboth, G. C. ....	do ....	Township outlines, between the 5th and 6th base lines, Ranges 17 to 20; and Ranges 25 to 28 west of 2nd I.M.; also between the 6th and 7th base lines west of 3rd I.M.
Sheppard, C. G. ....	River David, Que..	Townships 5 to 8, Range 13; Townships 7 and 8, Ranges 14 and 15; Township 13, Ranges 14 to 16; Township 14, Ranges 16 to 18 west of 2nd I.M.
Simpson, G. A. ....	Ottawa, Ont. ....	Township 53, Ranges 23 and 24; Townships 54 and 55, Ranges 23 to 25; Townships 56 and 57, Range 25 west of 4th I.M., and Township outlines.
Sing, J. G. ....	Stratford, Ont. ....	Township outlines, between the 4th and 5th base lines, Ranges 14 to 16; between 3rd and 4th base lines, Ranges 13 to 16 west of 2nd I.M., and between the 4th and 5th base lines west of 3rd I.M.
Snow, J. A. ....	Ottawa, Ont. ....	Townships 22 to 24, Ranges 15 and 16; Township 25, Ranges 17 to 20; and Township 26, Ranges 18 and 19 west of 2nd I.M.
Starkey, S. M. ....	Queen's Co., N.B.	Townships 37 to 40, Ranges 1 and 2 west of 3rd I.M., and Township outlines.
Talbot, A. C. ....	Montmagny, Que.	Township outlines, between the 3rd and 5th base lines, Ranges 15 and 16 west of 2nd I.M.; also between the 4th and 5th base lines west of 3rd I.M.
Thompson, W. S., D.T.S.	Cannington, Ont..	Fourth base line west of 3rd I.M., and Meridians transverse thereto.
Traynor, Isaac ....	Dundalk, Ont. ....	Ninth base line, Ranges 9 to 14 west of 2nd I.M.; also Townships 32 and 33, Ranges 10 to 14 west of 2nd I.M., and Township outlines.
Vincent, F. ....	Murray Bay, Que..	Township 12, Ranges 13 and 14; Township 13, Ranges 12 and 13; Township 14, Ranges 11 to 13 and Ranges 21 to 23; Township 15, Ranges 21 and 22 west 2nd I.M.
Wagner, W. ....	Ossowa, Man. ....	Township 24, Ranges 30 and 33; Townships 27 and 28, Ranges 31 and 32; Townships 21 and 22, Range 31; Townships 20, 23, 24, 27 and 28 west of 1st P.M.
Warren, Jas. ....	Kincardine, Ont. ..	Townships 9 and 10, Ranges 27 and 28 west of 1st P.M.; Township 8, Range 18; Township 9, Ranges 9 to 19 west of 2nd I.M.



SCHEDULE (No. 13) showing Surveyors employed and Work performed by each, during the year 1882—*Concluded*.

Name.	Residence.	Description of Work performed.
Wilkins, Fred. W., D.T.S.	Norwood, Ont ....	Township outlines, between the 4th and 5th base lines, Range 25 to 3rd I.M., and between the 5th and 6th base lines west of 3rd I.M.
Wilson, Hugh ....	Mount Forest, Ont	Township 45 A and 45, Ranges 26 to 28; Township 46 A, Range 26 west of 2nd I.M., and Township outlines.
Wolff, C. E. ....	Ottawa, Ont. ....	Township outlines, between the 3rd and 4th base lines, Ranges 17 to 20; between the 2nd and 3rd base lines, Ranges 17 and 18 west of 2nd I.M., and between the 4th and 5th base lines west of 4th I.M.

SCHEDULE (No. 14) showing Surveyors employed and Work performed by each, during the year 1883.

Abrey, G. B. ....	Little Current, Ont	11th Base Line, from 3rd to 4th Meridian; part of 4th Meridian, and 15th Base from 4th Meridian to Range 17.
Armstrong, F. W.	Orillia, Ont. ....	Meridian outlines between 1st and 5th Bases, west of 4th and 5th Meridians.
Ashe, W. A., D.T.S.	Quebec. ....	12th Base Line from Range 5, west of 3rd Meridian, to 4th Meridian; and parts of 13th and 14th Bases, east from 4th Meridian.
Aylen, Chas. P., D.T.S.	Aylmer, Que. ....	Townships 1, 2 and 3, Ranges 13, 14, 15 and 16; Township 4, Ranges 11 to 16, west of the 2nd Meridian.
Beatty, D. ....	Delta, Ont. ....	Townships 55, 56 and 57, Ranges 18, 19, 20 and 21; Townships 54 to 57, Range 22; Townships 56 and 57, Ranges 23 and 24; Township 50, Range 26; Township 51, Ranges 25 and 26, west of the 4th Meridian.
Beatty, W. ....	do ....	Townships 45 and 46, Ranges 18, 19, 20, 21; Townships 49 and 50, Ranges 24 and 25; Township 51, Range 24, west of the 4th Meridian.
Belanger, P. R. A.	L'Islet, Que ....	Meridian outlines west of the 3rd Meridian, between 7th and 8th Bases, and examination of contract surveys.
Bigger, C. A. ....	Plantagenet, Ont.	Examination of contract surveys.
Blake, F. L. ....	Toronto, Ont. ....	Townships 37, 38 and 39, Ranges 4 and 5; Township 33, Range 5; Townships 29 to 36, Range 6, west of the 3rd Meridian.
Bourgeault, A. ....	St. Jean Port Joli, Que.	Townships 15 and 16, Ranges 4 to 9; Township 9, Ranges 17 to 19; Township 10, Ranges 16 to 20, west of the 4th Meridian.
Bourgeois, John ..	Three Rivers, Que.	Townships 25 to 26, Ranges 12 to 16; Townships 23 and 24, Ranges 1 and 2; west of the 3rd Meridian; Townships 23 and 24, Range 29, west of the 2nd Meridian.
Brabazon, S. L. ....	Portage du Fort, Que.	Townships 15 to 18, Ranges 19 to 21; part of Township 8, Range 22; parts of Township 9, Ranges 22, 23 and 24; part of Township 8, Range 25; Township 10, Ranges 22, 23 and 24; Township 8, Range 26, west of the 4th Meridian.
Bray, Edgar ....	Oakville, Ont. ....	9th Base line from Range 5, west of the 3rd Meridian, to Range 5, west of 5th Meridian; also, meridian outlines near 5th Meridian.
Brownjohn, T. C. ....	Grimsby, Ont. ....	Townships 13 and 14, Ranges 4 to 6, west of the 4th Meridian.
Brunelle, F. E. ....	Three Rivers, Que.	Townships 21 and 22, Ranges 3 to 8; Townships 25 and 26, Ranges 17 and 18; Township 26, Ranges 19 to 21; Township 25, Range 21, west of the 3rd Meridian.
Burke, Jos. ....	Winnipeg, Man. ....	Townships 23 and 24, Ranges 5 to 8; Township 25, Range 5 to 11; Township 26, Ranges 7 to 11, west of the 3rd Meridian.
Burnet, Peter. ....	Orillia, Ont. ....	Townships 23 and 24, Ranges 21 to 26, west of the 3rd Meridian.
Burrows, J. J. ....	Ottawa, Ont. ....	Township 22, Range 21; Townships 23 and 24, Ranges 19 to 21; Township 25, Ranges 16 to 22; Township 26, Ranges 16 to 21, west of the 4th Meridian.
Caddy, E. C. ....	Cobourg, Ont. ....	Townships 43 and 44, Ranges 19 to 22; Townships 45 to 49, Ranges 22 and 23, west of the 2nd Meridian.
Caddy, C. F. ....	Campbellford, Ont.	Townships 17 to 22, Ranges 1 and 2, west of the 3rd Meridian.
Casgrain, J. F. B. ....	Quebec ....	Township 24, Range 25; part of Townships 25 and 26, Range 24; Township 23, Range 28; Townships 24 and 25, Ranges 27 and 28; Township 26, Ranges 25 to 29; Township 25, Range 29, west of the 2nd Meridian; Townships 23 to 26, Ranges 3 and 4, west of the 3rd Meridian.



SCHEDULE (No. 14) showing Surveyors employed and Work performed by each, during the year 1883—*Continued.*

Name.	Residence.	Description of Work performed,
Cavana, A. G. . . .	Brechin, Ont. . . . .	Meridian outlines, between 10th and 11th, and 11th and 12th Bases, west of 3rd Meridian.
Cotton, A. F. . . . .	Ottawa, Ont. . . . .	Meridian outlines, between 3rd and 4th Bases, west of 3rd Meridian.
Charbonneau, M. J. .	St. Boniface, Man.	Townships 27 and 28, Ranges 23 to 29, west of the 2nd Meridian; Townships 26 and 27, Ranges 5 and 6; Townships 27 and 28, Ranges 7 and 8, west of the 3rd Meridian.
Cheesman, Thos. . .	Mitchell, Ont. . . . .	Township 17, Ranges 13 to 15; Township 18, Ranges 13 and 14; Townships 19 and 20, Ranges 13 to 15, west of the 4th Meridian.
Chipman, W. . . . .	Brockville, Ont. . . .	Townships 13 and 14, Ranges 6 to 11, west of the 3rd Meridian; Township 9, Ranges 23 and 24, Townships 10 to 12, Ranges 24 and 25, west of the 3rd Meridian.
Crawford, N. . . . .	Winnipeg, Man. . . . .	Townships 15 to 18, Ranges 22 to 24, west of the 4th Meridian.
D'Amours, J. W. . . .	Quebec. . . . .	Townships 13 to 16, Ranges 16 to 18; Townships 11 and 12, Ranges 20 to 23, west of the 4th Meridian.
Dawson, E. C. . . . .	New Glasgow, N.S.	Township 20, Range 18; Township 19, Ranges 19 to 24; Townships 21 and 22, Ranges 19 and 20, west of the 4th Meridian.
Deane, M. . . . .	Lindsay, Ont. . . . .	Survey of Settlement of St. Albert. Township outlines between the 13th and 14th Bases, west of the 4th Meridian.
Dechesne, L. M. . . .	St. Roch, Que. . . . .	Townships 13 to 16, Ranges 3 to 5; Townships 9 to 12, Ranges 18 and 19, west of the 3rd Meridian.
Desjardins, C. . . . .	Ottawa, Ont. . . . .	Townships 13 and 14, Ranges 24 to 29, west of the 3rd Meridian; Township 9, Range 9; Townships 10 to 12, Ranges 9 and 10, and Township 12, Range 8, west of the 4th Meridian.
Doupe, J. . . . .	Winnipeg, Man. . . . .	Townships 37 to 40, Ranges 6 and 7, west of the 3rd Meridian; Townships 52 and 53, Range 3, west of the 4th Meridian.
Drummond, Thos. . .	Montreal, Que. . . . .	Part of 9th, 10th and 11th Bases, between 2nd and 3rd Meridians; and part of 13th Base, between 3rd and 4th Meridians; also, part of 3rd Initial Meridian.
DuBerger, C. C. . . .	Murray Bay, Que. . .	Townships 15 and 16, Ranges 24 to 29, west of the 3rd Meridian; Townships 9 to 11, Ranges 5 and 6; Townships 11 and 12, Range 4, west of the 4th Meridian.
Dudderidge, Jas. . .	Lachute, Que. . . . .	Townships 21 and 22, Ranges 18 to 23; Townships 25 and 26, Range 29, west of the 3rd Meridian; Township 25, Range 1; Township 26, Ranges 1 and 2, west of the 4th Meridian.
Dufresne, J. I. . . . .	St. Thomas de Montmagny, Que.	Townships 17 and 18, Ranges 3 to 6; Townships 19 and 20, Ranges 5 and 6; Townships 13 and 14, Ranges 13 to 15, west of the 4th Meridian.
Dumais, H. . . . .	Chicoutimi, Que. . .	Sub-division of part of the Wa-wa-see-ca-pow Reserve; 9th Base Line from the 2nd Meridian to the western boundary of Range 8, and 2nd Meridian from the north boundary of Township 30, to the north boundary of Township 32; also, sub-division of Township 33, Range 3, west of the 2nd Meridian.
Dumais, P. T. C. . . .	do . . . . .	Townships 11 to 13, Ranges 23 and 24; Township 13, Ranges 21, 22, 25 and 26; Townships 14 and 15, Range 24, west of the 2nd Meridian; Townships 9 to 12, Range 16 and 17, west of the 3rd Meridian.
Eaton, W. Case. . . .	Winnipeg, Man. . . . .	Townships 41 to 44, Ranges 4 and 5, west of the 3rd Meridian.
Ellis, H. D. . . . .	London, Ont. . . . .	Meridian exterior from the eastern boundary of Range 2, west of the 4th Meridian, to the western boundary of Range 18, between the 13th Base and the 13th Correction Line.
Fafard, Eug. . . . .	L'Islet, Que. . . . .	Townships 13, 14, 15 and 16, Ranges 15, 16 and 17; Townships 9, 10 and 11, Ranges 28, 29 and 30; Township 12, Ranges 29 and 30, west of the 3rd Meridian.
Fawcett, T., D. T. S.	Gravenhurst, Ont. . .	8th Base Line, from Range 8, west of 3rd Meridian to Range 9, west of 5th Meridian; 7th Base, from Range 4 to Range 8, west of 5th Meridian; 6th Base, from Range 2 to 6, west of the 5th Meridian; also Meridian outlines west of 5th and between said bases.
Fitton, C. E. . . . .	Orillia, Ont. . . . .	Township 26, Ranges 17 and 20; Township 27, Ranges 17 to 22; Township 28, Ranges 19 to 22, west of the 2nd Meridian; Township 27, Ranges 2, 3 and 4; Township 28, Ranges 2 and 3, west of the 3rd Meridian.
Foster, F. L. . . . .	Windsor, Ont. . . . .	Survey of Rat River Settlement.
Francis, John. . . . .	Winnipeg, Man. . . . .	Townships 9, 10, 11 and 12, Range 28; Townships 11, 12, 13, 14, 15 and 16, Range 27; Townships 13, 14, 15 and 16, Ranges 25 and 26; Township 14, Ranges 29 and 30; part of Townships 15 and 16; Range 30, west of the 4th Meridian.

SCHEDULE (No. 14) showing Surveyors employed and Work performed by each, during the year 1883—*Continued.*

Name.	Residence.	Description of Work performed.
Francis, J. J. . . .	Sarnia, Ont. . . . .	Townships 22, 23 and 24, Ranges 22, 23 and 24; Township 25, Ranges 23 to 25; Township 26, Ranges 22 to 25; Townships 21 and 22, Ranges 25, 26 and 27, west of the 4th Meridian.
Garden, Jas. F. . . .	Toronto, Ont. . . . .	Meridian outlines between 10th and 11th Bases, west of 3rd Meridian, also between 11th and 12th Bases, west of 4th Meridian.
Gilliland, T. B. . . .	Eugenie, Ont. . . . .	Townships 6 and 7, Ranges 17 and 18; Township 7, Range 16; Townships 9 and 10, Ranges 21, 22 and 23, west of the 2nd Meridian; Township 11, Ranges 10 to 13; Township 12, Ranges 9 to 13, west of the 3rd Meridian.
Gosselin, P. . . . .	Quebec . . . . .	Townships, 17, 18, 19 and 20, Ranges 10, 11 and 12; Township 11, Range 19; Township 12, Ranges 18 and 19, west of the 4th Meridian.
Gosselin, N. . . . .	do . . . . .	Townships 17, 18, 19 and 20, Ranges 7, 8 and 9; Township 12, Range 17; Township 11, Ranges 17 and 18, west of the 4th Meridian.
Grondin, L. S. E. . .	Rimouski, Que. . . .	Townships 11 and 12, Ranges 11, 12 and 13; Townships 10 and 12, Range 14, west of the 4th Meridian.
Hart, Milner. . . . .	St. Mary's, Ont. . . .	Examination of contract surveys.
Henderson, E. D. . .	Hemmison, Que. . . .	Townships 23 and 24, Ranges 18, 19 and 20; Township 25, Ranges 19 and 20, west of the 3rd Meridian.
Hermon, R. W. . . .	Rednersville, Ont. . .	Examination of contract surveys.
Hewson, T. R. . . .	Peterboro', Ont. . . .	Meridian outlines between 6th and 8th bases, west of the 4th and 5th Meridians.
Jephson, R. J. . . .	Bracebridge, Ont. . .	Townships 21, 22, 23, 24, Ranges 7, 8, 9; Townships 25 and 26, Range 8, west of the 4th Meridian.
Kains, Tom. . . . .	St. Thomas, Ont. . . .	14th Base, from 5th Meridian to Range 4; 12th Base, from 5th to 4th Meridian; 10th Base, from 4th Meridian to Range 3, west of 5th Meridian; also Meridian outlines near 5th Meridian.
Kerr, Hugh. . . . .	Annapolis, N.S. . . .	Townships 13, 14, 15, 16, Ranges 12, 13, 14; Township 9, Ranges 25 and 26; Townships 10 and 11, Range 26, west of the 3rd Meridian.
Kirk, J. A. . . . .	Stratford, Ont. . . . .	Townships 13 and 14, Range 28; Townships 15 and 16, Ranges 28 and 29; Townships 17 and 18, Ranges 28, 29, 30, west of the 4th Meridian; Townships 17 and 18, Range 1, west of the 5th Meridian; Townships 21 and 22, Range 2, west of the 5th Meridian.
Klotz, O. J. . . . .	Preston, Ont. . . . .	3rd Base from 4th Meridian to Range 20, west; and 2nd Base, from Range 24, west of the 4th Meridian, to the 3rd Initial Meridian.
Larue, C. E. . . . .	Quebec. . . . .	Townships, 23, 24, 25, 26, Ranges 28 and 29, west of the 4th Meridian; Township 23, Range 1; Township 24, Ranges 1, 2, 3, 4, west of the 5th Meridian.
Laurie, R. C. . . . .	Battleford, Saskatchewan.	Battleford Town Plot survey; Townships 39 and 40, Ranges, 9, 10, 11, west of the 3rd Meridian.
Leber, Charles. . . .	St. Boniface, Man. . .	Townships 17 and 18, Ranges, 27, 28, 29, 30; Townships 19 and 20, Ranges, 27, 28, 29, west of the 3rd Meridian; Township 9, Ranges 10 to 14; Township 10, Ranges 11 to 13, west of the 4th Meridian.
Leber, Hector. . . .	St. Wenceslas, Que . .	Townships 37 and 38, Ranges 27, 28, 29; Townships 39 and 40, Ranges 27 and 28; Township 41, Range 27; Township 43, Ranges 27 and 28; Township 44, Range 27; Township 45, Ranges 26, 27, 28; Township 46, Range 26, west of the 2nd Meridian.
Leclerc, Charles. . .	St. Jean, Port Joli, Que.	Townships 9 and 10, Range 24; Townships 13 and 14, Ranges 29 and 30, west of the 2nd Meridian; Township 12, Range 1; Townships 13, 14, 15, 16, Ranges 1 and 2, west of the 3rd Meridian.
Legendre, J. B. O. . .	Somerset, Que . . . .	Townships 19 and 20, Range 11; Townships 21, 22, 23, 24, Ranges 9, 10, 11, west of the 3rd Meridian.
Maddock, J. A. . . .	Norwood, Ont. . . . .	Meridian outlines between 7th and 9th Bases, west of the 3rd Meridian.
Magrath, C. A., D.T.S.	Aylmer, Que. . . . .	Parts of 13th and 14th Bases, and the 12th Base, between 4th and 5th Initial Meridians.
Martin, A. F. . . . .	Emerson, Man. . . . .	Townships 15, 16, 17, 18, Ranges 21, 22, 23, west of the 3rd Meridian; Townships, 9, 10, 11, Ranges 7 and 8; Township 12, Ranges 6 and 7, west of the 4th Meridian.



SCHEDULE (No. 14) showing Surveyors employed and Work performed by each, during the year 1883—*Continued.*

Name.	Residence.	Description of Work performed.
Michaud, J. Ls...	Rimouski, Que....	Township 14, Range 16; Township 15, Ranges 26 and 27; Townships, 16, 17, 18, Ranges 25, 26, 27, west of the 2nd Meridian; Townships 9, 10, 11, 12, Ranges 14 and 15, west of the 3rd Meridian.
Miles, C. F.....	Toronto, Ont. ....	Meridian outlines between 7th and 8th Bases, west of the Initial Meridian.
Murphy, F. ....	Mount Forest, Ont	Townships 45, 46, 47, 48, Ranges 4 and 5; Townships 47 and 48, Ranges 6 and 7, west of the 3rd Meridian.
McArthur, J. J....	Aylmer, Que.....	Meridian outlines, between 12th and 13th Bases, west of the 4th Meridian; also re-posting of 5th Meridian, from 11th Base to 14th Base.
McKenna, J. J....	Dublin, Ont.....	Townships 17 and 18, Ranges 9, 10, 11; Township 19, Ranges 9 and 10, west of the 3rd Meridian.
McLatchie, John..	Winnipeg, Man...	Townships 17, 18, 19, 20, Ranges 1, and 2; Townships 19 and 20, Ranges 3 and 4; Township 11, Range 14; Townships, 9, 10, 11, 12, Range 15; Township 9, Range 16; Townships 11 and 12, Range 16, west of the 4th Meridian.
McLean, J. K....	Mount Forest, Ont	Meridian outlines, between 11th and 14th Bases, west of the 3rd Meridian.
MacMartin, G. E.	St. Andrews, Que.	Townships 25 and 26, Ranges, 12, 13, 15; Townships 21, 22, 23, 24, Ranges 16, 17, 18, west of the 4th Meridian.
McPhillips, Geo...	Winnipeg, Man...	Township 20, Range 9, west of the 2nd Meridian, and scaling River Qu'Appelle, from the point where it intersects the 5th Correction Line in Township 19, Range 5, west of the 2nd Meridian, westward.
McPhillips, R. C..	do ..	Townships 23 and 24, Range 27; Townships 19, 20, 21, 22, Ranges 28 and 29, west of the 4th Meridian; Townships 17 and 18, Range 2; Townships 19 and 20, Ranges 1 and 2; Townships 21 and 22, Range 1, west of the 5th Meridian.
McVittie, A. W...	Barrie, Ont. ....	Town plot, Fort MacLeod.
O'Dwyer, J. S....	Granby, Que.....	Townships 21, 22, 23, 24, 25, 26, Ranges 4, 5, 6; Townships 25 and 26, Range 7, west of the 4th Meridian.
Ogilvie, J. H....	Campbellford, Ont	Townships 17, 18, 19, 20, Ranges 15, 16, 17, west of the 3rd Meridian.
Ogilvie, Wm.....	Ottawa, Ont ....	5th Meridian from Edmonton to Athabasca River; 21st Base Line, from 6th Meridian, westward.
O'Keeffe, D. C....	Hamilton, Ont....	Townships, 17, 18, 19, 20, 21, 22, Ranges 24, 25, 26, west of the 3rd Meridian.
Ord, L. R.....	Ottawa, Ont.....	Meridian outlines, between 11th and 12th Bases, west of the 4th Meridian.
Patrick, L. ....	Portage la Prairie, Man.	Townships 45, 46, 47, 48, 49, Range 24; Townships 45, 46, 47, Range 25; Township 47, Range 20; Townships 48, 49, Ranges 20, 21, west of the 2nd Meridian.
Proudfoot, H. B..	Clinton, Ont. ....	Meridian outlines, between 11th and 14th Bases, west of the 3rd Meridian.
Purvis, F.....	Eganville, Ont....	Townships 25 and 26, Ranges 9, 10, 11; Townships 21, 22, 23, 24, Ranges, 13, 14, 15, west of the 4th Meridian.
Rainboth, E. J. ...	Aylmer, Que.....	Townships 19 and 20, Ranges 3, 4, 5, 6, 7, 8; Township 20, Range 10; Township 9, Range 22; Townships 10, 11, 12, Ranges 22 and 23, west of the 3rd Meridian.
Rainboth, G. C...	do ..	Townships 17 and 18, Ranges 3, 4, 5, 6, 7, 8; Township 20, Range 9; Townships 9, 10, 11, 12, Ranges 20 and 21, west of the 3rd Meridian.
Reid, J. L. ....	Prince Albert, Saskatchewan.	Township 15, Range 17; Township 17, Ranges 16, 17 and 18; Townships 18, 19, 20, Range 17; Township 15, Range 23; Township 16, Ranges, 21, 22, 23, 24; Township 49, Ranges 25 to 28; Township 48, Ranges 27 and 28, west of 2nd Meridian.
Reilly, W. R. ...	Wardsville, Ont ..	Townships 19 and 20, Ranges 18, 19, 20, 21, 22, 23, west of the 3rd Meridian.
Robertson, H....	Montmagny, Que.	Townships 15 and 16, Ranges 6, 7, 8, 9, 10 and 11; Townships 9, 10, 11, Range 27; Township 12, Ranges 26 to 28, west of the 3rd Meridian.
Ross, Geo.....	Beaverton, Ont....	Townships 17 and 19, Ranges 16 to 18; Township 18, Ranges 15 to 18; Township 20, Ranges 16, and 17; Townships 11 and 12, Ranges 24 and 25, west of the 4th Meridian.
Roy, G. P.....	Quebec.....	Townships 17, 18, 19, 20, Ranges 25, 26, 27; Townships 23 and 24, Ranges 25 and 26; Townships 25 and 26, Ranges 26 and 27, west of the 4th Meridian.



SCHEDULE (No. 14) showing Dominion Land Surveyors employed and Work accomplished by each, during the year 1883—*Concluded*.

Name.	Residence.	Description of Work performed.
Selby, H. W. ....	Toronto, Ont. ....	Townships 35, 36, 37, 38, 39, Range 3; Townships 40, Ranges 3 and 4; Township 37, Range 2; Townships 42 and 43, Ranges 2 and 3, west of the 3rd Meridian.
Sheppard, C. G. ..	River David, Que.	Townships 21, 22, 23, 24, Ranges 1, 2, 3; Township 25, Ranges 2 and 3; Township 26, Range 3, west of the 4th Meridian.
Simpson, Geo. A. .	Ottawa, Ont. ....	Township 52, Range 18; Townships 53 and 54, Ranges 18, 19, 20, 21; Township 53, Range 22; Townships 55, 56, 57, Ranges 26 and 27; Townships 52, 53, 54, Range 28, west of the 4th Meridian.
Sing, J. G. ....	Stratford, Ont. ...	Meridian outlines, between 2nd and 4th Bases, west of the 4th Meridian.
Sirois, J. E. ....	Kamouraska, Que.	Townships 15, 16, 17, 18, Ranges 18, 19, 20, west of the 3rd Meridian; Townships 9 and 10, Ranges 1 and 2; Townships 11 and 12, Range 1, west of the 4th Meridian.
Snow, J. A. ....	Ottawa, Ont. ....	Townships 21, 22, 23, 24, Ranges 10, 11, 12, west of the 4th Meridian.
Snow, J. F. ....	do . . .	Townships 13 and 14, Ranges 19, 20, 21, 22, 23, 24; Townships 9 and 10, Ranges 25, 26, 27; Townships 11 and 12, Range 26, west of the 4th Meridian.
Starkey, S. M. ....	Starkey, P.O., Queen's Co., N.B.	Townships 21, 22, 23, 24, Ranges 12, 13, 14; Townships 25 and 26, Ranges 22, 23, 24, 25, west of the 3rd Meridian.
Staunton, F. H. L.	Hamilton, Ont. ....	Townships 15 and 16, Ranges 10, 12, 13, 14, 15, west of the 4th Meridian.
Stephens, H. H. .	Owen Sound, Ont.	Townships 31, 32, Ranges 9, 10, 11, 12, 13; Township 33, Range 13, west of the 2nd Meridian.
Stewart, John. ....	Moosomin, Assiniboia.	Townships 21, 22, 23, 24, Ranges 15, 16, 17; Townships 25, 26, Ranges 26, 27, 28, west of the 3rd Meridian.
Talbot, A. C. ....	Montmagny, Que.	Meridian outlines, between 8th and 12th Bases, west of the 2nd Meridian.
Talbot, P. C. ....	do . . .	Townships 17, 18, 19, 20, Ranges 12, 13, 14, west of the 3rd Meridian.
Thompson, W. T., D. T. S.	Cannington, Ont. .	Traverse from the 5th to the 6th Meridian; 6th Meridian, from the 20th to the 26th Base Line; 22nd Base Line, from the 6th Meridian to the boundary of British Columbia.
Towle, C. E. ....	Lennoxville, Ont. .	Townships 13, 14, 15, 16, Ranges 1, 2, 3, west of the 4th Meridian.
Traynor, Isaac. ....	Dundalk, Ont. ....	Meridian outlines, between 8th and 12th Bases, west of 2nd Meridian.
Vincent, F. ....	Murray Bay, Que.	Townships 13 and 14, Ranges 18, 19, 20, 21, 22, 23, west of the 3rd Meridian; Townships 9 and 10, Ranges 3 and 4; Townships 11 and 12, Ranges 2 and 3, west of the 4th Meridian.
Wagner, Wm. ....	Ossowa, Man. ....	Big Island, Lake Manitoba. Townships 21, 22, 23, 24, Range 3, east of the 1st Meridian; Townships, 19, 20, 21, Ranges 3 and 4, west of the 1st Meridian.
Warren, James. . .	Kincardine, Ont. .	Townships 13 and 14, Ranges 7, 8, 9, 10, 11, 12; Township 9, Range 20; Townships 8, 9 10, Range 21, west of the 4th Meridian.
Webb, A. C. ....	Brighton, Ont. ....	Examination of contract surveys.
Wheeler, A. O. ....	Collingwood, Ont. .	Meridian outlines, between 1st and 3rd Bases, west of 2nd Meridian, and between 3rd and 4th Bases, west of 2nd and 3rd Meridians.
Wilkins, F. W., D.T.S.	Norwood, Ont. ....	Meridian outlines, between 8th Correction Line and 10th Base, west of the 3rd Meridian.
Wolff, C. E. . . .	Ottawa, Ont. . . .	Meridian outlines, between 1st and 5th Bases, west of the 4th and 5th Meridians.

SCHEDULE (No. 15) showing Dominion Land Surveyors employed and Work accomplished by each, during the year 1884.

Explorers.		
Ogilvie, Wm. ....	Ottawa, Ont. ....	Exploration of Peace and Athabasca Rivers.
Klotz, O. J., D. T. S.	Preston, Ont. . . .	Exploration of Saskatchewan and Nelson Rivers.

SCHEDULE (No. 15) showing Dominion Land Surveyors employed and Work performed by each, during the year 1884—*Continued.*

Name.	Residence.	Description of Work performed.
<i>Outline Surveyors.</i>		
Bray, Edgar.....	Oakville, Ont. ....	Meridian Township outlines between 4th Initial Meridian and Range 10, and between the 14th and 15th Base Lines.
Belanger, P.R.A..	L'Islet, Que.....	Meridian Township outlines between 4th Initial Meridian and Range 8, and between the 12th Correction Line and the 14th Base Line; also Meridian outlines between the 12th and 13th Bases, and between Ranges 10 and 15 west of 3rd Initial Meridian.
Cotton, A. F.....	Ottawa, Ont.....	Meridian Township outlines between 13th and 16th Base Lines, and between Ranges 9 and 14, west of 4th Initial Meridian; also the 16th Base Line, from Range 10 to Range 14, inclusive.
Dufresne, J. I., D. T. S.	St. Thomas de Montmagny, Que.	Meridian Township outlines between 12th and 14th Base Lines, and between Range 9, west of the 3rd Initial Meridian, and the 4th Initial Meridian; also eastern boundaries of Townships 29, 30, 31 and 32 in Range 2, west of the 3rd Initial Meridian..
Fawcett, Thomas, D. T. S.	Gravenhurst, Ont.	Extension of the Township system, and establishment of corner monuments along the Bow River Valley and the C. P. R. line, from the Gap to the summit of the Kicking Horse Pass; also along the upper valley of the Cascade River, Devil's Head Creek and Devil's Head Lake; also sub-division of some sections on Cascade River for coal locations; also survey of the eastern boundaries of Townships 27 and 28, Range 2; Townships 29 and 30, Ranges 5 and 6; Townships 23, 24, 25 and 26, Ranges 6 and 7; and Townships 23, 24, 25 and 26, Range 8, all west of the 5th Initial Meridian.
Garden, James F.	Toronto, Ont.....	Township outlines between 10th and 12th Base Lines, and between 4th Initial Meridian and Range 10.
Kains, Tom. ....	St. Thomas, Ont..	Meridian Township outlines between the 13th Base and Correction Line, and between Ranges 14 and 22, west of the 4th Initial Meridian; also a survey of the old settlement at Victoria, and connection of the settlement survey at Fort Saskatchewan with the Township system.
Miles, C. F. ....	Toronto, Ont.....	Meridian Township outlines west of the 4th Meridian, between 10th and 12th Base Lines, from Range 20 to Range 27.
Magrath, C. A., D.T.S.	Aylmer, Que.....	Meridian Township outlines west of 4th Initial Meridian, between the 14th and 16th Base Lines, and between Ranges 8 and 21; also, 16th Base Line from Range 15 to Range 20 inclusive.
McLean, J. K....	Mount Forest, Ont.	Meridian Township outlines between the 8th and 10th Base Lines, from Range 7 to Range 19, west of 4th Initial Meridian.
McArthur, J. J...	Aylmer, Que.....	Meridian Township outlines between the 12th and 14th Base Lines, and between Range 22 west of the 4th Initial Meridian and the 5th Initial Meridian; also, Meridian outlines between the same Base Lines west of the 5th Initial Meridian.
Ord, L. R. ....	Toronto, Ont.....	Meridian Township outlines between the 8th and 10th Base Lines, from Range 19 west of the 4th Initial Meridian to Range 4 west of the 5th Initial Meridian.
Wilkins, F. W., D.T.S.	Norwood, Ont....	Meridian Township outlines between the 8th and 10th Bases, from Range 19 west of the 3rd Meridian to Range 5 west of the 4th Meridian.
<i>Examiners of Survey Contracts.</i>		
Hermon, R. W....	Rednersville, Ont.	
Webb, A. C. ....	Brighton, Ont....	
<i>Road Surveyor.</i>		
Hart, Milner.....	St. Mary's Ont....	Survey of trails in the District of Prince Albert.
<i>Sub-division Surveyors.</i>		
Aylen, C. P., D.T.S	Aylmer, Que.....	Townships 21 and 22 in Ranges 7, 8 and 9, west of the 4th Meridian.
Beatty, W.....	Delta, Ont.....	Townships 47 and 48 in Ranges 24 and 25, and Township 45 in Range 24, west of the 4th Meridian.

SCHEDULE (No. 15) showing Dominion Land Surveyors employed and Work accomplished by each, during the year 1884—*Continued.*

Name.	Residence.	Description of Work performed.
Bigger, C. A. . . .	Ottawa, Ont. . . .	Township 9 in Range 17 ; Townships 9, 10 and 11 in Ranges 18 and 19 ; Township 12 in Range 19 ; and Townships 7 and 10 in Range 21, west of the 4th Meridian. Re-survey of Township 19 in Ranges 20, 21 and 22, west of the 4th Meridian ; also, examination of Calgary Town Plot Survey.
Boivin, E. . . . .	Chicoutimi, Que.	Township 7 in Ranges 25, 26 and 27, and Township 8 in Ranges 23, 24, 25 and 26, west of the 3rd Meridian ; also re-survey of Township 20 in Range 18, and Township 19 in Range 19, west of 4th Meridian ; also survey of east boundaries of Townships 5 and 6 in Ranges 25, 26, 27 and 28, west of the 3rd Meridian.
Bourgeault, A. . .	St. Jean Port Joli, Que. . . . .	Township 7 in Range 29 ; Townships 8 in Ranges 27, 28, 29 and 30, west of the 3rd Meridian ; and Township 8 in Range 1, west of the 4th Meridian.
Bourgeois, John . .	Three Rivers, Que.	Township 25 in Ranges 19 and 20, and Townships 25 and 26 in Ranges 26, 27 and 28, west of the 3rd Meridian.
Brabazon, S. L. . . .	Portage du Fort. .	Townships 25 and 26 in Range 29, west of the 4th Meridian ; Townships 25 and 26 in Ranges 1 and 2, and Township 26 in Range 3, west of the 5th Meridian.
Brunelle, F. E. . . .	Somerset, Que. . . .	Townships 27 in Ranges 26 and 27, west of the 3rd Meridian.
Burke, Joseph. . . .	Winnipeg, Man. . . .	Townships 47 and 48 in Ranges 25 and 26, and Township 48 in Ranges 27 and 28, west of the 3rd Meridian.
Burrows, J. J. . . .	Ottawa, Ont. . . . .	Township 27 in Range 2, and Townships 27 and 28 in Ranges 3 and 4, west of the 3rd Meridian.
Carre, Henry. . . . .	Brockville, Ont. . . .	Township 49 in Range 28, and Township 50 in Ranges 25, 26, 27 and 28, west of the 3rd Meridian.
Crawford, W. . . . .	Winnipeg, Man. . . .	Township 41 in Range 16 ; Townships 41 and 42 in Range 17, and Townships 43 in Ranges 17 and 18, west of the 4th Meridian.
Charbonneau, M. J. .	St. Boniface, Man.	Townships 36, 37, 38 and 39 in Ranges 26, 27 and 28, and Township 40 in Range 27, west of 4th Meridian ; and Townships 37 and 38 in Range 1, west of the 5th Meridian.
Deane, M. . . . .	Lindsay, Ont. . . . .	Townships 27 and 28 in Range 9, and Townships 29 and 30 in Ranges 8 and 9, west of the 3rd Meridian.
Dechesne, L. M. . . .	St. Roch, Que. . . . .	Townships 39 and 42 in Range 13, and Townships 40, 41, 42 and 43 in Range 14, west of the 3rd Meridian.
Doupe, Joseph. . . .	Winnipeg, Man. . . .	Townships 18 and 19 in Ranges 7 and 8 ; and Township 18 in Range 9, east of the Principal Meridian.
Drummond, Thos., D.T.S.	Montreal, Que. . . .	Township 45 in Ranges 16 and 17 ; Township 46 in Ranges 18 and 19 ; and Township 49 in Ranges 26 and 27, west of 3rd Meridian.
DuBerger, C. C. . . .	Murray Bay, Que.	Township 33 in Range 5 ; and Townships 32, 33 and 34 in Range 6, west of the 3rd Meridian.
Dumais, P. T. C. . .	Ottawa, Ont. . . . .	Townships 41, 42, 43 and 44 in Range 15 ; and Townships 41 and 42 in Range 16, west of the 3rd Meridian.
Foster, F. L. . . . .	Windsor, Ont. . . . .	Township 41 in Range 7 ; and Townships 42 and 43 in Ranges 6 and 7 ; and traverses of Lakes in Townships 47 and 48 in Ranges 4 and 5, west of 3rd Meridian.
Freeman, N. R. . . .	Queen's Co., N.S. . .	Townships 43 and 44 in Ranges 24 and 25 ; and Township 44 in Range 22, west of the 4th Meridian.
Gore, T. S. . . . .	Regina, Assiniboia	Townships 29 and 30 in Ranges 17, 18 and 19, west of the 2nd Meridian.
Gosselin, L. . . . .	Québec . . . . .	Townships 27 and 28 in Ranges 27 and 28, west of the 4th Meridian ; Townships 27 and 28 in Range 1, and Township 28 in Range 2, west of the 5th Meridian.
Kerr, James. . . . .	Queen's Co., N.S. . .	Township 44 in Ranges 18 and 19 ; and Townships 43 and 44 in Range 23, west of the 4th Meridian.
Kirk, J. A. . . . .	Stratford, Ont. . . .	Township 43 in Ranges 26, 27 and 28 ; and Township 44 in Ranges 27 and 28, west of the 4th Meridian.
Leclerc, C. F. . . . .	St. Jean Port Joli.	Township 45 in Range 20 ; and Townships 45 and 46 in Ranges 21 and 22, west of the 3rd Meridian.
Lucas, S. B. . . . .	Peace Hills, Alberta.	Townships 50 and 51 in Range 3 ; and Township 50 in Range 4, west of the 5th Meridian.
Lett, C. A. . . . .	Emerson, Man. . . .	Townships 35, 36 and 37 in Range 9 ; and Township 37 in Ranges 10 and 11, west of the 3rd Meridian.
McArthur, James.	Aylmer, Que. . . . .	Townships 47, 48 and 49 in Ranges 23 and 24, west of the 3rd Meridian.
McLatchie, John. . .	Winnipeg, Man. . . .	Townships 24, 25 and 26 in Range 17 ; Townships 24 and 25 in Range 19 ; and Township 25 in Range 20, west of the 1st Meridian.



SCHEDULE (No. 15) showing Dominion Land Surveyors employed and Work accomplished by each, during the year 1884—*Concluded*.

Name.	Residence.	Description of Work performed.
MacMartin, G. E.	St. Andrews, Que.	Townships 45, 46 and 47, in Ranges 27 and 28, west of the 3rd Meridian.
McPhillips, Geo. . .	Winnipeg, Man. . .	Townships 25 and 26, in Range 18; Townships 6, in Ranges 25 and 27, west of the 1st Meridian.
McPhillips, R. C. . .	do . . .	Township 19 in Ranges 4, 5, 6 and 8; and Township 19a in Range 8, west of the 2nd Meridian.
Michaud, J. L. . . .	Matane, Que. . . . .	Township 42 in Ranges 17 and 18; Townships 43 and 44 in Range 18, and Townships 44 and 45 in Range 19, west of the 3rd Meridian.
O'Dwyer, J. S. . . .	Granby, Que. . . . .	Township 45 in Range 23, and Township 46 in Ranges 23, 24, 25 and 26, west of the 3rd Meridian.
Purvis, Frank . . . .	Eganville, Ont. . . .	Townships 34, 35 and 36 in Range 7, and Townships 35, 36 and 37 in Range 8, west of the 3rd Meridian.
Reilly, W. R. . . . .	Wardsville, Ont. . .	Townships 51 and 52 in Ranges 25, 26, 27 and 28, west of the 3rd Meridian.
Robertson, H. H. . .	Montmagny, Que. . .	Township 39 in Range 12, and Townships 40 and 41 in Ranges 12 and 13, west of the 3rd Meridian.
Ross, George. . . . .	Beaverton, Ont. . . .	Townships 21, 22 and 25 in Range 3, and Townships 25 and 26 in Range 4, west of the 5th Meridian.
Roy, G. P. . . . .	Quebec. . . . .	Townships 23 and 24 in Range 28; Townships 25 and 26 in Ranges 26 and 27, and Township 27 in Ranges 25 and 26, west of the 4th Meridian.
Selby, H. W. . . . .	Toronto, Ont. . . . .	Townships 44 and 45 in Ranges 6 and 7, west of the 3rd Meridian.
Snow, J. F. . . . .	Ottawa, Ont. . . . .	Township 7 in Ranges 1 and 2, and Townships 8 in Ranges 2, 3, 4 and 5, west of the 4th Meridian. Resurvey of Township 19 in Ranges 23 and 24, west of the 4th Meridian.
Stephens, H. H. . . .	Owen Sound, Ont. . .	Township 31 in Range 6, 7 and 8, and Township 32 in Ranges 7 and 8, west of the 3rd Meridian.
Talbot, A. C. . . . .	Montmagny, Que. . .	Township 48, in Ranges 20, 21 and 22, and Township 49 in Ranges 21 and 22, west of the 3rd Meridian.
Towle, C. E. . . . .	Lennoxville, Ont. . .	Townships 31 and 32 in Range 9, and Townships 33 and 34 in Ranges 8 and 9, and Township 33 in Range 7, west of the 3rd Meridian.
Vincent, F. . . . .	Murray Bay, Que. . .	Townships 38 in Ranges 8, 9, 10 and 11, and Townships 39 in Ranges 8 and 9, and Townships 35 and 41 in Range 6 west of the 3rd Meridian.
Wagner, Wm. . . . .	Ossowa, Man. . . . .	Townships 18 in Ranges 1 and 2, and Townships 19 and 20 in Ranges 1, 2 and 3 west of the 1st Meridian.
Wheeler, A. O. . . . .	Ottawa, Ont. . . . .	Townships 31, 32 and 33 in Ranges 18 and 19, and Township 32 in Range 17; also, re-survey of east boundary of Township 32 in Range 19 west of 2nd Meridian.
<i>Town Plot Surveyors.</i>		
McVittie, A. W. . . .	Calgary, Alberta. . .	Town plot, Calgary, Alberta.
McPhillips, Geo. . . .	Winnipeg, Man. . . .	Town do Point Douglas, Man.
Vaughan, J. W. . . . .	do . . . . .	Town do Silver City, Alberta.

SCHEDULE (No. 16) showing Dominion Land Surveyors employed and Work accomplished by each during the year 1885.

Bourgeois, John . .	Three Rivers, Que.	Traverse of part of Bow, Belly and South Saskatchewan Rivers in Ranges 11, 12 and 13 west of the 4th Initial Meridian; traverse of railway line in Ranges 19 to 24 west of the 4th Initial Meridian; establishing boundaries of Sections 6 and 31 adjoining 2nd Base Line in Townships 4 and 5, Range 4, west of the 4th Initial Meridian.
Bélanger, P. R. A. . .	L'Islet, Que. . . . .	Survey of town plots of Silverton, Morley, Golden and Donald; also, sub-division at Banff Station.
DuBerger, C. C. . . .	Murray Bay, Que. . .	Survey of trail from Moosomin to Moose Mountain; survey of Mission and Indian land at Fort Qu'Appelle.
Dufresne, J. I. . . . .	Montmagny, Que. . .	Survey of town lots at Whitemouth, Man.; survey at Rat River, Man.; alteration of boundary of Indian Reserve at Beren's River.
Drummond, Thos. . . .	Montreal, Que. . . .	Determination of latitudes and longitudes along the line of the Canadian Pacific Railway in British Columbia.

SCHEDULE (No. 16) showing Dominion Land Surveyors employed and Work accomplished by each, during the year 1885—*Continued.*

Name.	Residence.	Description of Work performed.
Doupé, Jos.....	Winnipeg, Man ..	Sub-division of Townships 18, in Ranges 6 and 7, Townships 18 in Ranges 8 and 9 east of the Principal Meridian.
Fawcett, Thos., D. T. S.	Gravenhurst, Ont.	Exploratory survey from Rat Portage to Cat Lake.
Klotz, O. J., D.T.S.	Preston, Ont.....	Determination of latitudes and longitudes along the line of the Canadian Pacific Railway in British Columbia.
Lucas, S. B. ....	Hull, Que .....	Sub-division of Township 50, in Ranges 3 and 4, and Township 51, in Range 3, west of the 5th Meridian.
McPhillips, Geo..	Winnipeg, Man...	Sub-division of Township 18, Range 10, east of Principal Meridian.
McPhillips, R. C. .	do .....	do 10, Ranges 2, 3 and 4, west of the 2nd do
Ogilvie, Wm. ....	Ottawa, Ont.....	Survey of the Canadian Pacific Railway Line in British Columbia.
Reiffenstein, J. H.	Victoria, B.C.....	Sub-division of townships in New Westminster District, B.C.
Wagner, Win.....	Ossowa, Man.....	do 21, Ranges, 5, 6, 7, west of Principal Meridian.

SCHEDULE (No. 17) showing Dominion Land Surveyors employed and Work accomplished by each, during the year 1886.

Abrey, G. B. ....	Toronto, Ont.....	Sub-division of Township 23, in Ranges 8 and 9; Township 24, in Range 10, and Township 27, in Range 12, west of the 2nd Initial Meridian.
Boivin, E. ....	Bagotville, Que....	Sub-division of Township 51, in Range 24, and Township 53, in Ranges 26 and 27, west of the 3rd Initial Meridian.
Brabazon, A. J. .	Portage du Fort, Que.	Sub-division of Townships 29, 32 and 33, in Range 16, and Township 31, in Range 17, west of the 2nd Initial Meridian.
Brunelle, F. E. .	Somerset, Que ...	Sub-division of Township 3, in Range 27, and Townships 4 and 5, in Range 28, west of the 2nd Initial Meridian, and outlines of Township 5, in Range 4, west of the 3rd Initial Meridian.
Bourgeois, John ..	Three Rivers, Que.	Sub-division of Townships 4 and 5, in Range 26, Townships, 4, 5, and 6, in Range 27, west of the 2nd Initial Meridian, and Township 4, in Range 3, west of the 3rd Initial Meridian.
Bray, Edgar .....	Oakville, Ont.....	Sub-division of Township 5, in Range 23; Township 6, in Ranges 21, 22 and 23, and Township 7, in Range 20; and outlines of Township 4, in Range 23, all west of the 4th Initial Meridian and Traverses of Belly, Bow and St. Mary's Rivers.
Bélanger, P. R. A.	L'Islet, Que .....	Sub-division of Township 24, in Range 19; Townships 24 and 25, in Range 10; Townships 25 and 26, in Ranges 11, 12 and 13, and Townships 26 and 27, in Range 14 west of the 5th Initial Meridian.
Bigger, C. A. ....	Ottawa, Ont. ....	Survey of trails from Red Deer River to Calgary and Macleod and from Macleod to Blackfoot Crossing.
Cotton, A. F. ....	Ottawa, Ont.....	Sub-division of Townships 3 and 4, in Ranges 28 and 29, west of the Coast Meridian; and Townships 12, 15, 24 and 27, New Westminster District.
Dumais, P. T. C. .	Hull, Que .....	Sub-division of Townships 52 and 53, in Ranges 16 and 17, west of the 4th Initial Meridian.
Drewry, W. S. ....	Belleville, Ont....	Sub-division of Townships 50 and 51, in Range 23; Township 50 in Range 24, and Township 49, in Range 25, west of the 3rd Initial Meridian.
Dechesne, L. N. .	St. Roch des Aulnets, Que.	Sub-division of Townships 21 and 22, in Ranges 27, 28 and 29, west of the 3rd Initial Meridian.
DuBerger, C. C. .	Murray Bay, Que.	Sub-division of Townships 34, 35 and 36, in Range 1, west of the 5th Initial Meridian.
Dennis, J. S. ....	Aylmer, Que.....	Correction and inspection of surveys.
Doupé, Jos.....	Winnipeg, Man...	Correction and inspection of surveys.
Dufresne, J. I. ....	Montmagny, Que..	Survey of trails in the neighbourhood of Portage la Prairie, Totogon and Poplar Point.
Freeman, N. R....	Milton, N.S. ....	Sub-division of Townships 50 and 51, in Ranges 27 and 28, west of the 4th Initial Meridian.
Fitzgerald, J. W. .	Peterboro', Ont...	Sub-division of Townships 11, 12 and 13, in Ranges 9 and 10, and Townships 11 and 12, Range 11, east of the 1st Meridian.
Fawcett, Thos. ..	Gravenhurst, Ont.	Sub-divisions of parts of Township 17, in Ranges 12, 13 and 14; Townships 18 and 19, in Ranges 14 and 15; Townships 16, 17, 18 and 19, in Ranges 16, 17 and 18; Townships 19 and 20, in Range 19, and Township 20, in Ranges 20, 21 and 24, west of the Coast Meridian.



SCHEDULE (No. 17) showing Dominion Land Surveyors employed and Work accomplished by each, during the Year 1886—*Continued.*

Name.	Residence.	Description of Work performed.
Gosselin, L. . . . .	Quebec, Que. . . . .	Sub-division of Township 50, in Ranges 17 and 18, and Township 51, in Ranges 16 and 17, west of the 4th Initial Meridian.
Garden, James F. . . . .	Toronto, Ont. . . . .	Sub-division of parts of Townships 20 and 21, in Range 13; Townships 19 and 20, in Range 14; Township 20, in Range 15; Townships 21, 22 and 23, in Range 17; Townships 20 and 21, in Range 18; Township 21, in Range 19; Townships 21, in Ranges 20, 21 and 23, west of the Coast Meridian.
Green, T. D. . . . .	Ottawa, Ont. . . . .	Survey of trail from Fort Ellice to Moosomin, and from Fort Ellice to north-east corner of Township 20 in Range 22, west of the 2nd Initial Meridian. Also traverse of Jumping Creek.
Klotz, Otto J. . . . .	Preston, Ont. . . . .	Survey of Canadian Pacific Railway from summit of Rocky Mountain Range to Revelstoke on the Columbia River, and astronomical work in British Columbia and North-West Territories.
Laurie, R. C. . . . .	Battleford, Sask. . . . .	Survey of trail from Battleford to Swift Current.
Michaud, J. L. . . . .	Ste. Anne de Bellevue, Que. . . . .	Sub-division of Township 35 in Range 28, and Townships 31, 32, 33 and 34 in Ranges 28 and 29, west of the 4th Initial Meridian.
MacMartin, G. E. . . . .	St. Andrews, Que. . . . .	Sub-division of Townships 6 and 7 in Range 29, Townships 6 and 7 in Range 30, west of the 4th Initial Meridian.
McPhillips, Geo. . . . .	Winnipeg, Man. . . . .	Sub-division of Township 21 in Range 10, and Townships 22 and 23 in Range 11, west of the 1st Initial Meridian.
McAree, John . . . . .	Toronto, Ont. . . . .	Survey of trails in the neighbourhood of Kildonan and other points in Manitoba.
McLatchie, John. . . . .	Ottawa, Ont. . . . .	Survey of northerly trail from east boundary of Township 15 in Range 13, west of the 1st Initial Meridian to Fort Ellice.
McPhillips, R. C. . . . .	Winnipeg, Man. . . . .	Survey of four trails in the Province of Manitoba.
McArthur, J. J. . . . .	Aylmer, Que. . . . .	Topographical survey along the line of the Canadian Pacific Railway through the Rocky, Selkirk and Gold ranges of mountains.
Macdougall, A. H. . . . .	Port Arthur, Ont. . . . .	Sub-divisions of Township 24 in Ranges 11 and 12, Townships 25 and 26 in Range 11, and part of Township 24 in Range 10, all west of Principal Meridian.
Ogilvie, Wm. . . . .	Ottawa, Ont. . . . .	Longitude determinations in British Columbia.
Rainboth, G. C. . . . .	Aylmer, Que. . . . .	Sub-division of Township 51 and 52 in Range 1, and Township 51 in Range 2, west of the 5th Initial Meridian.
Reid, J. L. . . . .	Port Hope, Ont. . . . .	Survey of trail from Troy to Prince Albert.
Robertson, H. H. . . . .	Montmagny, Que. . . . .	Sub-division of Townships 23 and 24 in Ranges 27, 28 and 29, west of the 3rd Initial Meridian.
Roy, George P. . . . .	Quebec, Que. . . . .	Survey of trail from Calgary to Edmonton.
Starkey, S. M. . . . .	Starkey, N.B. . . . .	Sub-division of Townships 50 in Ranges 1 and 2, west of the 5th Initial Meridian.
Sproat, A. . . . .	Prince Albert, Saskatchewan. . . . .	Correction survey in Townships 45, 46 and 47 in Range 4, and Township 46 in Range 5, west of the 3rd Initial Meridian.
Stewart, G. A. . . . .	Winnipeg, Man. . . . .	Survey of Hot Springs Reservation at Banff; traverses of Bow and Spray Rivers and laying out of town plots, roads, &c.
Webb, A. C. . . . .	Brighton, Ont. . . . .	Correction and inspection of surveys.
Wilkins, F. W. . . . .	Norwood, Ont. . . . .	Exploratory survey of Lake Winnipeg.
Wolff, C. E. . . . .	Ottawa, Ont. . . . .	Sub-division of Townships 7, 8 and 9 in Range 1, and Townships 6 and 7, in Range 2, west of the 5th Initial Meridian.

SCHEDULE (No. 18) showing Dominion Land Surveyors employed and Work accomplished by each, during the year 1887.

Bélanger, P. R. A. . . . .	L'Islet, Que. . . . .	Sub-division of Townships in the vicinity of the Columbia River, B.C.
Bray, Edgar . . . . .	Oakville, Ont. . . . .	Survey of block onlines between Lakes Winnipeg and Manitoba.
Brownlee, J. H. . . . .	Brandon, Man. . . . .	Survey of outlines near Lake Dauphin.
Beatty, Walter . . . . .	Delta, Ont. . . . .	Sub-division of Township 24, in Range 18, and part of Township 24 in Range 16, west of the Principal Meridian.
Boivin, E. . . . .	Bagotville, Que. . . . .	Sub-division of Township 51, in Range 24, Township 53, in Ranges 25, 26 and 27, west of the 3rd Initial Meridian.
Bigger, C. A. . . . .	Ottawa, Ont. . . . .	Sub-division of Townships 29, 30 and part of 31, in Range 4, west of the 5th Initial Meridian.
Brabazon, A. J. . . . .	Portage du Fort, Que. . . . .	Sub-division of Townships 29, 30 and 31, in Range 3, west of the 5th Initial Meridian.
Cotton, A. F. . . . .	Ottawa, Ont. . . . .	Sub-division of Townships in New Westminster District, B.C.



SCHEDULE (No. 18) showing Dominion Land Surveyors employed and Work accomplished by each, during the year 1887—*Concluded.*

Name.	Residence.	Description of Work performed.
Drewry, W. S....	Belleville, Ont....	Topographical survey of the Rocky Mountains.
Doupe, Joseph....	Winnipeg, Man....	Survey of Main Street, Winnipeg.
Dufresne, J. L., D. T.S.....	Montmagny, Que.	Exploration survey, Lake Winnipegosis.
Dunais, P. T. C....	Hull, Que.....	Sub-division of Township 14, in Range 10, and Township 13, in Range 11, east of the Principal Meridian.
Dennis, J.S., D.T.S.	Aylmer, Que.....	Supervision of inspection and correction of surveys.
McAree, John, D. T.S.....	Toronto, Ont.....	Inspection and correction of surveys.
Driscoll, A.....	Aylmer, Que.....	do do
Du Tremblay, P.V.	Ste. Anne de la Pérade, Que....	(Sub-party) inspection and correction of surveys.
Brownjohn, T. C....	Granby, Ont.....	Inspection and correction of surveys.
Kirk, J. A.....	Stratford, Ont....	do do
Freeman, N. R....	Milton, N.S.....	do do
Traynor, S.....	Dundalk, Ont....	do do
Fawcett, Thos., D. T.S.....	Gravenhurst, Ont.	Sub-division of Townships, Kamloops District, B.C., south of Thompson River.
Fitzgerald, J. W....	Peterboro', Ont....	Sub-division of Townships 13 and 14, in Range 11, east of the Principal Meridian.
Garden, Jas. F....	Vancouver, B.C....	Sub-division of Townships, Kamloops District, B.C., north of Thompson River.
Green, T. D.....	Brantford, Ont...	Survey of trails, McLeod to Blackfoot Crossing, and the trail running along the Bow River, near Calgary.
Klotz, O.J., D.T.S.	Preston, Ont.....	Longitude determinations.
Laurie, R. C.....	Battleford, N.W.T.	Sub-division of Township 43, in Range 15, and Township 46, in Ranges 15 and 16, west of the 3rd Initial Meridian.
Miles, C. F.....	Walkerton, Ont....	Survey of Mounted Police reserves.
McLachie, John....	Ottawa, Ont.....	Sub-division of Townships, Spellamacheen District, B.C.
McArthur, J. J....	Aylmer, Que.....	Topographical survey of the Rocky Mountains.
McPhillips, R. C....	Winnipeg, Man....	Sub-divisions of fractional Townships 23 and 24, in Ranges 5 and 6; fractional Townships 15 and 16, in Range 5, east of the Principal Meridian.
MacMartin, G.E....	St. Andrew's, Que.	Sub-division of Townships 5 and 6, Range 25; Township 5, in Range 26; east $\frac{1}{2}$ Township 7, Range 25; south $\frac{1}{2}$ Township 4, Range 29, west of the 4th Initial Meridian; and parts of Townships 4, 5 and 6, in Range 1, west of the 5th Initial Meridian.
Ogilvie, W.....	Ottawa, Ont.....	Exploratory survey of Yukon River District.
Reid, J. Lestock....	Port Hope, Ont....	Survey of part of Qu'Appelle and Prince Albert Trail, &c.
Robertson, H. H....	St. Thomas, Que..	Survey of Ordnance lands.
Sproat, Alex.....	Prince Albert, N.W.T.....	Re-survey of Townships 45, 46 and 47, in Range 4, and Township 46, in Range 5, west of the 3rd Initial Meridian.
Small, W. A.....	Oak Point, Man...	Survey of outlines near Lake Dauphin.
St. Cyr, Arthur....	Quebec, Que....	Survey of boundaries of Rocky Mountains Park.
Wilkins, F. W., D.T.S.....	Norwood, Ont....	Survey of Methodist Mission reserves.
Woods, J. E.....	Aylmer, Que.....	Sub-division of Township 12, in Ranges 12 and 13, west of the Principal Meridian.

SCHEDULE (No. 19) showing Dominion Land Surveyors employed and Work performed by each, during the Year 1888.

Klotz, Otto J....	Preston, Ont.....	Longitudes and latitudes of Edmonton and Fort Pitt.
Fawcett, Thos....	Gravenhurst, Ont..	Survey of part of Churchill River.
Ogilvie, Wm.....	Ottawa, Ont.....	Survey of Porcupine and Mackenzie Rivers. Approximate determination of Alaska boundary.
Cotton, A. F.....	New Westminster.	Sub-division and other surveys in New Westminster District. Posting sections along Canadian Pacific Railway, from New Westminster to Lytton.
Garden, Jas. F....	Vancouver, B.C....	Posting sections along Canadian Pacific Railway, from Lytton to Shuswap Lake.

SCHEDULE (No. 19) showing Dominion Land Surveyors employed and Work accomplished by each, during the year 1888—*Concluded*.

Name.	Residence.	Description of Work performed.
Dufresne, J. I. ....	Montmagny, Que.	Posting sections along Canadian Pacific Railway, from Shuswap to Leachcoil.
McLatchie, J. ....	Ottawa, Ont. ....	Sub-division surveys in Spellamcheen Valley.
McArthur, J. J. ....	Aylmer, Que. ....	Topographical survey in Bow River Valley, including the National Park.
Drewry, W. S. ....	Belleville, Ont. ....	Topographical survey in Crow's Nest Pass and vicinity.
Bourgeois, John ..	Three Rivers, Que.	Survey of trail, Carlton to Green Lake.
Brown, C. P. ....	Winnipeg, Man. ....	Survey of Westbourne Highway.
Reid, J. L. ....	Port Hope, Ont. ...	Survey of trail through Township 48, Range 24, and Township 49, Range 23, west of the 2nd Initial Meridian. Corrections to old surveys in Prince Albert District.
Green, T. D. ....	Ottawa, Ont. ....	Survey of trails between Calgary and Morleyville, north and south of the Bow River, respectively. Part of trail from Blackfoot Crossing to Calgary. Re-sub-division of Townships 3 and 4, in Ranges 31 and 32, west of Principal Meridian.
St. Cyr, A. ....	Quebec, Que. ....	Survey of part of outlines of Rocky Mountains Park of Canada; part of 7th Correction Line, west of the 5th Initial Meridian. Traverse of parts of Bow and Columbia Rivers, and part of sub-division of Township 24 in Range 9, Township 24 in Range 16, and Township 25 in Range 11, all west of the 5th Initial Meridian.
Brownlee, J. H. ..	Brandon, Man. ....	Sub-division of Township 22 in Range 6, and fractional Township 22 in Ranges 9 and 10, west of Principal Meridian.
Brabazon, A. J. ....	Portage du Fort, Que.	Sub-division of Township 27 in Range 5; parts of Township 26 in Range 5; Township 26 in Range 6, and Township 28 in Range 5, all west of the 5th Initial Meridian.
Bigger, C. A. ....	Ottawa, Ont. ....	Sub-division of Township 2 in Ranges 24 and 25; Township 4 in Range 23; part of fractional Township 5 in Range 23; and part of Township 3, Range 24, all west of the 4th Initial Meridian.
Drummond, Thos.	Kamloops, B. C. ...	Sub-division of Townships 30 and 31 in Ranges 25 and 26, and Township 30 in Range 27, all west of the 4th Initial Meridian.
Deane, M. ....	Lindsay, Ont. ....	Sub-division of Township 22 in Ranges 4 and 5, and Township 23 in Range 5, all west of Principal Meridian.
Freeman, N. R. ..	Milton, N.S. ....	Sub-division of Township 22 in Ranges 7 and 8, and fractional Township 21 in Ranges 7 and 8, all west of Principal Meridian.
Fitzgerald, J. W. ..	Peterboro', Ont. ...	Sub-division of Township 15 in Range 11, east of Principal Meridian.
Magrath, C. A. ...	Lethbridge, Alta. ...	Sub-division of Township 8 in Ranges 19 and 20; Township 6 in Range 20; west half of Township 6 in Range 21; Townships 5 and 7 in Range 22; and Township 6 in Range 19, all west of the 4th Initial Meridian.
McPhillips, R. C. ..	Winnipeg, Man. ....	Sub-division of fractional Township 25 in Ranges 5 and 6, and fractional Township 16 in Range 6, all east of Principal Meridian.
MacMartin, G. E. ..	St. Andrews, Que.	Sub-division of Township 2 in Range 26, Township 12 in Range 29, and fractional Townships 12 and 13 in Range 30, all west of the 4th Initial Meridian.
Talbot, A. C. ....	Montmagny, Que. ..	Sub-division of Townships 27 and 28 in Ranges 21 and 22, west of the 4th Initial Meridian.
Traynor, I. ....	Dundalk, Ont. ....	Sub-division of Township 21 in Ranges 3 and 4, west of Principal Meridian.
Vincent, F. ....	Fraserville, Que. ...	Sub-division of Township 27 in Ranges 23 and 24, Township 28 in Ranges 23, 24, 25 and 26, and Township 29 in Ranges 25 and 26, all west of the 4th Initial Meridian.
Wolff, C. E. ....	Ottawa, Ont. ....	Sub-division of Townships 29 in Ranges 23, 24 and 27, and Township 30 in Ranges 23 and 24, west of the 4th Initial Meridian.
Dennis, J. S. ....	Ottawa, Ont. ....	Inspection and correction Surveys.
Belanger, P. R. A. ..	L'Islet, Que. ....	Re-survey of 4th and 5th Initial Meridians.
Driscoll, A. ....	Aylmer, Que. ....	Correction of Surveys.
Vicars, John. ....	Cannington, Ont. ...	do do
Leclerc, Chas. ....	St. Jean Port Joli, Que.	do do
O'Keeffe, D. C. ....	Fort Ellice, Man. ...	do do



SCHEDULE (No. 20)—Trails surveyed up to 9th of January, 1889, giving names of Trails, names of Surveyors and Date of Survey.

Year.	Name of Trail.	Surveyed by.	Mileage.
1869	Prairie Section showing lines surveyed for the Red River Road.....	J. A. Snow.....	60·48
1869	Red River Road from the edge of the prairie to Whitemouth River and its projection to Birch River.....	do.....	43·30
1876-7	Colonization Road from White Mud River to the village of Gimli, Keewatin.....	Walter Beatty.....	29·22
1877	Map showing the location of the Great Highway between Winnipeg and Portage la Prairie, Man.....	Edgar Bray.....	57·18
1876	Colonization Road from the village of Gimli to the North boundary of Section 36, Township 14, Range 4, E.....	Walter Beatty.....	31·28
1877	Great Highway between Portage la Prairie and the western boundary of Manitoba.....	Edgar Bray.....	41·22
1877	Highway between Baie Saint Paul and Oak Point, Manitoba.....	do.....	36·84
1877	Highway between Winnipeg and Oak Point, Manitoba.....	do.....	53·66
1877	Great Highway between Winnipeg and the Northern boundary of the Parish of Saint Peters, Manitoba.....	do.....	28·99
1878	Road No. 8, Headingly to western boundary, Province of Manitoba.....	C. J. Chapman.....	107·07
1878	Road No. 1, Winnipeg to West Lynne, Province of Manitoba.....	do.....	67·34
1878	Road No. 7, Dawson Road, Province of Manitoba.....	do.....	22·28
1881	Highway east side of Red River, Manitoba.....	A. G. Forrest.....	
1881		C. Desjardins.....	
1883		A. H. McDougall.....	
1883		J. A. Carbert.....	
1881	Road west and north of Gladstone.....	J. D. VanBuskirk.....	27·60
1881	Government Road at Westbourne.....	do.....	8·70
1884	Road along south branch of the Saskatchewan River to the northerly limit of Muskoday's Reserve.....	M. Hart.....	20·00
1884	Road from South Branch Road to Prince Albert <i>via</i> Island Lake.....	do.....	13·00
1884	Road from South Branch Road to Tait and Island Lake Road.....	do.....	
1884	Road from Prince Albert to Halcro Settlement.....	do.....	13·00
1884	Part of Saskatchewan Forks and Carlton Trail from rear line of lots settlement of Prince Albert.....	do.....	22·00
1884	Road from Section 6, on South Branch Road through Indian Reserve to Prince Albert.....	do.....	12·00
1884	Saskatchewan Forks and Carlton Road through Prince Albert Settlement.....	do.....	70·00
1884	Road from Carlton Forks southerly to Batoche's crossing and from Duck Lake to Gabriel's crossing.....	do.....	
1885	Road from Moosomin to a point 5 miles south-west of Moose Mountain P. O.....	C. C. Duberger.....	43·00
1886	Road from Edmonton to Calgary (part of).....	C. A. Bigger.....	85·00
1886	Main Trail from Calgary to McLeod (part of).....	do.....	85·00
1886	Old Trail from Portage la Prairie and along west side of Assiniboine River.....	J. I. Dufresne.....	30·00
1886	Trail from Poplar Point to the shores of Lake Manitoba.....	J. I. Dufresne.....	16·00
1886	Old Trail through Totogan and along west side of Lake Manitoba.....	do.....	26·00
1886	Trail from Calf Mountain to east boundary of Section 20, Township 3, Range 8, west of 1st.....	do.....	6·00
1886	Old trail from Section 1, Township 12, Range 9 to Section 25, Township 11, Range 10, west of 1st.....	do.....	7·00
1886	Southern Qu'Appelle trail.....	T. D. Green.....	165·00
1886	Moosomin trail, Fort Ellice to Moosomin.....	do.....	24·00
1886	Battleford to Swift Current.....	R. C. Laurie.....	175·00
1886	Northerly trail from Portage la Prairie to Fort Ellice.....	John McLatchie.....	93·00
1886	Morris to International boundary.....	R. C. McPhillips.....	27·00
1886	St. Boniface to Emerson.....	do.....	69·00
1886	St. Norbert to Pomeroy.....	do.....	15·00
1886	St. Boniface to Ste. Anne.....	do.....	25·00
1886	Highway St. Clements to Broken Head.....	John McAree.....	15·00
1886	Highway across Parish of St. Charles and part of Headingly, south of the Assiniboine River.....	do.....	8·00
1886	Highway from Red River to Cook's Settlement.....	do.....	10·00
1886	Highway Kildonan to Stony Mountain.....	do.....	11·00
1886	Highway St. Boniface to East Selkirk.....	do.....	24·00
1886	Deviation of M. Hart's trail through Fractional Section 24, Township 48, Range 26, west of 2nd I. M.....	A. Sproat.....	0·50
1886	Part of trail from Calgary to Edmonton.....	G. P. Roy.....	90·00



SCHEDULE (No. 20) Trails surveyed up to 9th of January, 1889, giving Names of Trails, Names of Surveyors and Date of Survey—*Concluded.*

Year.	Name of Trail.	Surveyed by	Mileage.
1886..	Part of Troy and Prince Albert trail.....	J. L. Reid.....	157'00
1887..	Main Street in City of Winnipeg, as defined by City By-laws, No. 35 of 1875, and No. 57 of 1876. ....	J. Doupe.....	2'50
1887..	Fort Macleod to Blackfoot Crossing.....	T. D. Green.....	78'00
1887..	Blackfoot Crossing to west boundary of I. R.....	do.....	21'00
1887..	Parts of Bow River Bottom trail.....	do.....	33'00
1887..	Parts of Macleod and Calgary, Calgary and Morleyville, and Calgary and Blackfoot Crossing trails in Township 24, Range 1, west 5..	do.....	6'00
1887..	Trail between Medicine Hat and Dunmore.....	J. A. Kirk.....	7'00
1887..	Carlton towards Prince Albert.....	J. L. Reid.....	
1887..	Carlton to Duck Lake.....	do.....	
1887..	From west limit of Lot 31, Prince Albert Settlement, to 3rd I. M..	do.....	6'00
1887..	Qu'Appelle and Wood Mountain.....	do.....	15'00
1887..	Troy and Prince Albert trail.....	do.....	
1887..	From Forks of Saskatchewan, westerly.....	do.....	
1888..	Part of trail from Forks to Prince Albert.....	do.....	4'00
1888..	Trail from Carrot River to Prince Albert.....	do.....	26'00
1888..	Road from Carlton to Green Lake.....	J. Bourgeois.....	120'00
1888..	North trail from Calgary to Morleyville.....	T. D. Green.....	29'06
1888..	Blackfoot Crossing and Calgary trail from west boundary of Blackfoot Reserve.....	do.....	26'31
1888..	Part of Fort Macleod and Calgary trail.....	do.....	0'50
1888..	South trail from Morleyville to Calgary.....	do.....	40'40
1888..	(Deviation of) Highway through the Municipality of Westbourne to correspond with location of Manitoba and North Western Ry....	C. P. Brown....	26'50

SCHEDULE (No. 21) of Reserves Surveyed at different points in Manitoba, Keewatin and the North-West Territories, for the Hudson's Bay Company.

Name of Reserve.	Location.	By Whom Surveyed.	Year.	Remarks.
Fort Edmonton.....	Saskatchewan...	W. S. Gore.....	1873	Inside settlement survey.
Rocky Mountain House.....	do ..	do ..	1873	
Fort Victoria.....	do ..	do ..	1873	
St. Paul.....	do ..	do ..	1873	Surrendered.
Fort Pitt.....	do ..	do ..	1873	Shown on Township Plan.
Battle River.....	do ..	do ..	1873	Tp. 44, Ranges 16 and 17, 3rd Mer.
Fort Carlton.....	do ..	do ..	1874	Tp. 44 and 45, Range 4, 3rd Mer.
Fort Albert.....	do ..	do ..	1873	Tp. 48, Range 26, 2nd Meridian.
Lac la Biche.....	do ..	do ..	1873	
Fort Assiniboine.....	do ..	do ..	1873	
Lake Ste. Anne.....	do ..	do ..	1873	
Lac la Nonne.....	do ..	do ..	1873	
St. Albert.....	do ..	do ..	1873	Tp. 54, Range 25, 4th Meridian.
Pigeon Lake.....	do ..	do ..	1873	
Old White Mud Fort.....	Cumberland ..	do ..	1873	Tp. 51 do 3, 5th do
Cumberland House.....	do ..	do ..	1873	
Fort à la Corne.....	do ..	do ..	1873	Tp. 48 do 19 and 20, 3rd Mer.
Moose Woods.....	do ..	do ..	1873	Surrendered.
Moose Lake.....	do ..	do ..	1873	Tp. 54, Range 21, 1st Meridian.
Grand Rapids.....	do ..	do ..	1873	Tp. 48 do 15 do
Fort Pelly.....	Swan River.....	do ..	1873	Tp. 32 do 32 do
Fort Ellice.....	do ..	do ..	1873	Tp. 16 do 28 do
Fort Qu'Appelle.....	do ..	do ..	1873	Tp. 20 and 21, R. 13 and 14, 2nd M.
Coteau de Tondre.....	do ..	do ..	1873	Touchwood Hills, surrendered.
Shoal River.....	do ..	do ..	1873	On Swan Lake, Tp. 42, R. 24, 1st M.
Fairford Mission.....	do ..	do ..	1873	Tp. 30, Range 9, 1st Meridian.
Lower Fort Garry.....	Red River.....	A. H. Vaughan..	1874	Stone Fort, St. Andrew's north.
Fort Alexander.....	Rainy River.....	C. F. Miles.....	1875	In Indian Reserve.
Fort Frances Reserves ...	do ..	do ..	{ 1874 1875	} Rainy River.
Rat Portage.....	do ..	do ..	1875	
Lake of the Woods.....	do ..	do ..	1875	At north-west angle.
Jackfish Creek.....	do ..	do ..	1875	Lake Winnipeg.
Hayfield Indian Portage ..	do ..	do ..	1875	do

SCHEDULE (No. 22) showing all Indian Reserves surveyed under instructions from the Surveyor General in Manitoba, Keewatin and the North-West Territories.

Name and Location of Reserve.	By whom Surveyed.	Year.
Ft. Alexander Reserve, Winnipeg River.	J. W. Harris, D.L.S.	1873
Crane River Reserve, Lake Manitoba	W. Wagner, D.L.S.	1874
do Ebb and Flow Lake.	do	1874
St. Peter's Reserve, Mouth of Red River.	(J. W. Harris, D.L.S.) (J. W. Harris, D.L.S.)	1873
Fairford River Reserve, Man.	W. Wagner, D.L.S.	1874
Lac Plat Reserve and North-West Angle River, Lake of the Woods.	G. A. Bayne, D.L.S.	1875
Paskonkin and the Bishop's wild lands reserve, Rainy River.	C. C. Forneri, D.L.S.	1876
Chief Manitobinas and Me-sho-tah Reserve, Rainy River.	do	1876
Kishe-ko-kaiks Reserve, Rainy River.	do	1876
Short Bear's Reserve, Townships 9 and 10, Range 8, west P. Meridian	J. L. Reid, D.L.S.	1876
Big Island and Sabaskon Bay, Lake of the Woods	C. F. Miles, D.L.S.	1876
Brokenhead Reserve (enlargement).	D. Sinclair, D.L.S.	1876
Town Plot, Thessalon River Reserve.	G. B. Abrey, D.L.S.	1876
Reserve for George Gordon's band at Little Touchwood Hills.	W. Wagner, D.L.S.	1875
Day Star's Reserve at Big Touchwood Hills, N.W.T.	do	1875
St. Martin's Lake Reserve, Man.	F. A. Martin, D.L.S.	1877
Water Hen River Reserve, Man.	do	1877
Reserve for Lean Man's Band, N.W.T.	Wm. Wagner, D.L.S.	1875
Fairford Mission Reserve, Man.	A. F. Martin, D.L.S.	1877
Ready Bow's Reserve, Big Touchwood Hills, N.W.T.	W. Wagner, D.L.S.	1875
Reserve for Gabriel Côté's Band on the Assiniboine River, Man.	do	1877
Way-way-see-cappo Reserve on the Birdtail Creek, Man.	do	1877
Norway House Reserve, Keewatin.	D. Sinclair, D.L.S.	1878
Moose Lake Reserve, Keewatin.	do	1878
Cross Lake Reserve, Keewatin.	do	1878
Grand Rapids Reserve, Saskatchewan River, Keewatin.	do	1878
Rossville Indian Village, Norway House Reserve, Keewatin.	do	1878
Chief Pabamacha's Reserve on the River "la Seine"	R. J. Ross, D.L.S.	1877
Sturgeon Falls Reserve on the River "la Seine"	do	1877
Reserve for Kebaguin's Band on the Kawawagamok River, Treaty 3.	do	1877
do for Chief Blackstone on Nequaquon Lake, and Nameukan River, Treaty 3.	do	1877
do for Chacachase's Band on Qu'Appelle River, N.W.T.	W. Wagner, D.L.S.	1876
do for Pasquak's Band, Upper Fishing Lake and Qu'Appelle, N.W.T.	do	1876
do for Okemis or Little Rosebud on Qu'Appelle River, N.W.T.	do	1876
do for Sakimay or Mosquito's Band on Qu'Appelle River and Crooked Lake, N.W.T.	do	1876
Reserve at Duck Bay, Lake Winnipegosis, Man.	Wm. Wagner, D.L.S.	1878
do for the Keys Band at Swan River, Man.	do	1877
do for White Bear's Band at Moose Mountain, Man.	do	1877
do for Chief Loud Voice, at Qu'Appelle River and Round Lake, N.W.T.	do	1876
do for Ka-kee-wis-ta-haw on Qu'Appelle River, N.W.T.	do	1876
do for Star Blankets Band, N.W.T.	do	1876
do for Chief Sou-sonse at Dog Creek, Lake Manitoba.	A. F. Martin, D.L.S.	1878
do at Black River, Lake Winnipeg.	J. L. P. O'Hanly, D.L.S.	1878
do at Dog's Head, do	do	1878
do at Poplar River, do	do	1878
do at Beren's River, do	do	1878
South Saskatchewan Reserve, with sketch of Bow and Belly Rivers, N.W.T.	A. P. Patrick, D.T.S.	1879
Reserve for Chief Oos-con-na-geist, or "Redgut," Little Otter Tail, Treaty 3.	A. J. Crickmore, D.L.S.	1878
Reserve No. 17, Chief Wah-shis-kince, at Clearwater Lake	do	1878
do No. 17, Chief Wah-shis-kince, Portion A., Rainy River.	do	1878
do No. 27, Portion B. at Little Wabigon Lake, Treaty 3.	do	1878
do No. 27, do A. do	do	1878
do No. 26, do C., Chief Oos-con-na-geist, Rainy Lake.	do	1878
do No. 26, do B. do	do	1878
Sioux Reserve, Pipestone Creek, Oak Lake, Manitoba.	Wm. Wagner, D.L.S.	1878
do for Chief Kish-i-konce, Swan River, do	do	1877
do at Fort à la Corne, N.W.T., for Chief James Smith.	M. Hart, D.L.S.	1878
do for Chief Mistowasis, at Snake Plain, N.W.T.	E. Bray, D.L.S.	1878
do for band of Chief Ata-ka-koop, on trail to Green Lake, N.W.T.	do	1878



SCHEDULE (No. 22) showing all Indian Reserves surveyed, &c.—*Concluded.*

Name and Location of Reserve.	By whom Surveyed.	Year.
Reserve at Sturgeon Lake, N.W.T., Chief Wm. Twatt.....	E. Stewart, D.L.S.....	1878
do for band of Chief John Smith, "Muskoday," N.W.T.....	do.....	1878
do do Chacastapasin, on South Saskatchewan, N.W.T.....	do.....	1878
do do Chief Red Pheasant, Eagle Hills, N.W.T.....	Geo. Simpson, D.L.S.....	1880
do at Brokenhead River, Manitoba.....	J. W. Harris, D.L.S.....	1873
do for Enoch's Band at mouth of Bird Tail Creek, Man.....	Wm. Wagner, D.L.S.....	1875
do for White Eagle's Band at Oak River, Man.....	do.....	1875
do for Metis Band at Riding Mountain House, Man.....	do.....	1875
do for Chief Oa-za-we-kwun, on the Assiniboine River, Man.....	do.....	1873
do A, B, C, D and No. 1, at Rainy Lake, Treaty No. 3.....	E. C. Caddy, D.L.S.....	1875
Reserves Nos. A1 and A2 at Lac des Milles Lacs and Seine River...	R. J. Ross, D.L.S.....	1875
Blackfoot Reserves, Chief Crowfoot, Bow River.....	Wm. Ogilvie, D.L.S.....	1878
Reserve for Yellow Quill's Band in Township 5, Range 11, west Principal Meridian, Man.....	J. L. Reid, D.L.S.....	1876
Reserves for bands of See-kas-kootch and Makao, near Fort Pitt, N. W. T.....	G. A. Simpson, D.L.S.....	1879
Reserve for band of Chief Mosquito, Eagle Hills, N.W.T.....	do.....	1878
do for bands of Pus-kee-eh-kee-hee-win and Oo-noo-pow-o-hay-ooos at Frog Lake, N.W.T.....	do.....	1879
do for Chief Chipwayan's son, near Fort Carlton, N.W.T.....	do.....	1879
do at Crane River, Man.....	Wm. Wagner, D.L.S.....	1873
do 35H and 32C at Sabbaskang District, Lake of the Woods.....	C. F. Miles, D.L.S.....	1879
do 35C, Lake of the Woods.....	do.....	1879
do 35B, Ohbahbikon Lake, Lake of the Woods.....	do.....	1879
do 35F at Sabbaskang proper.....	do.....	1879
do 35D, Sabbaskang District.....	do.....	1879
do 31 and 35A, Nayangoshing.....	do.....	1879
do No. 30 or Agency Reserve.....	do.....	1879
do No. 31E, Big Island.....	do.....	1879
do No. 35G, Big Grassy River.....	do.....	1879
do No. 35E at Little Grassy River.....	do.....	1879
do No. 38A at Washagaines Bay.....	A. H. Vaughan, D.L.S.....	1880
do No. 32B at Black River.....	do.....	1880
do No. 38C at Winnipeg River.....	do.....	1880
do Nos. 32, 33 and 34A at Lobstick and Whitefish Bays, Lake of the Woods.....	do.....	1880
do 38B, Pine Portage, Lake of the Woods.....	do.....	1880
do for band of Chief Beardy at Duck Lake, N.W.T.....	J. L. Reid, D.L.S.....	1880
do do Chief Alexis, Lake St. Anne, N.W.T.....	G. A. Simpson, D.L.S.....	1880
do do Chief Alexander, River L'Barre, N.W.T.....	do.....	1880
do do Chief Michel Calahoo, Sturgeon River, N.W.T.....	do.....	1880
Indian Farm, Assiniboine River, Manitoba.....	Plan compiled in D.L.O.....	1882
Reserve No. 2 on Roseau River, Man.....	A. P. Patrick, D.T.S.....	1879
do for Peigan Indians on Old Man's River, N.W.T.....	do.....	1879
do for Stony Indians at Morleyville, Bow River, N.W.T.....	G. A. Simpson, D.L.S.....	1881
do for band of Poundmaker on Battle River, N.W.T.....	do.....	1881
do do White Cap, South Saskatchewan River, N.W.T.....	do.....	1881
do do One Arrow, Prince Albert District, N.W.T.....	do.....	1881
do do Petty-quaw-ky, Battleford District, N.W.T.....	do.....	1881
do do Flying Dust, Meadow Lake, N.W.T.....	do.....	1881
do do Thunderchild and Moosomin, North Saskatchewan River, N.W.T.....	do.....	1881

SCHEDULE (No. 23) of Micrometer and Exploratory Surveys performed under instructions from the Surveyor General.

Name or Description of Survey.	By whom Performed.	Year.
<i>Micrometer Surveys.</i>		
Peace River, Fort Chipewyan to Dunvegan, 604 miles.....	Wm. Ogilvie, D.L.S.....	1888
Athabasca River, from Athabasca Landing to Fort Chipewyan, 431 miles .....	do .....	1884
Athabasca River, from mouth of Lesser Slave River to Athabasca Landing, 69 miles .....	Thos. Fawcett, D.T.S.....	1888
Upper Churchill River, from Clearwater River to Frog Portage, 563 miles .....	do .....	1888
Frog Portage to Cumberland House, 180 miles.....	do .....	1888
Saskatchewan River, from the Forks to Grand Rapids, 416 miles ....	O. J. Klotz, D.T.S.....	1884
Nelson River, from Lake Winnipeg to Hudson's Bay, 435 miles.....	do .....	1884
Part of shore line Lake Winnipegosis and connecting waters, 573 miles .....	J. I. Dufresne, D.T.S. ....	1887
Shore line of Lake Winnipeg, 1,030 miles.....	F. W. Wilkins, D.T.S.....	1886
Winnipeg, English and Albany Rivers and connecting waters, from Rat Portage to Cat Lake, 504 miles.....	Thos. Fawcett, D.T.S.....	1885
North Saskatchewan River, from Rocky Mountain House to 5th Initial Meridian, 89 miles .....	Jos. Doupe, D.L.S. ....	1885
Yukon River, from Taiya Pass to longitude 141° west.....	Wm. Ogilvie, D.L.S.....	1887
Part of Mackenzie River .....	do .....	1888
Brazeau and part of North Saskatchewan River .....	J. J. McArthur.....	1883
Portion of the C. P. Railway line in British Columbia.....	E. A. Wilmott.....	1884
do do do .....	Wm. Ogilvie.....	1885
do do do .....	O. J. Klotz.....	1886
Traverse from the 5th to the 6th Initial Meridian.....	W. T. Thompson.....	1885
<i>Exploratory Surveys.</i>		
Lakes Manitoba, Winnipeg, Winnipegosis and connecting waters...	H. B. Smith .....	1872
Lake Winnipeg and vicinity .....	G. C. Ramboth, D.L.S.....	1872
Lake of the Woods and Lake Roseaux.....	H. Svenkern l.....	1872
Duck Mountains, Lake Dauphin and west shore of Lake Manitoba, south of Manitoba House.....	M. Harris.....	1872
West shore of Lake Winnipeg, including islands and rivers as far north as Narrows .....	G. F. Newcomb.....	1872
Country on Brokenhead River and near foot of Lake of the Woods...	John Dennis.....	1872
North Saskatchewan River, from Edmonton to Prince Albert..	W. F. King, D.T.S.....	1878
The Saskatchewan District in the vicinity of Edmonton and Lake St. Ann.....	do .....	1880
Carrot River and district.....	A. L. Russell, D.L.S.....	1879
North Saskatchewan River, from Rocky Mountain House to Edmonton.....	J. C. Nelson, D.L.S.....	1879
Between Fort MacLeod and Fort Qu'Appelle .....	M. Aldows, D.T.S. ....	1880
In the Cypress Hills district.....	W. F. King, D.T.S.....	1881
The Valley of the Souris River and adjoining country.....	Prof. Macoun.....	1880
West slope of Duck and Porcupine Mountains and in Valley of Red Deer River.....	do .....	1881
Exploratory survey east shore Lake Manitoba, Oak Point to Narrows.	Wm. Wagner.....	1872

SCHEDULE (No. 24) of Correction Surveys performed up to the 31st of December, 1888.

Township.	Range.	Meridian.	By whom Performed.	Year.	Description of Work.
18	28	1	John McLatchie.. . . .	1886	Traverse of lake and outlines of Section 24.
3	32	1	do .....	1886	Remeasurement of lines, &c.
21	9	2	G. B. Abrey .....	1886	Traverse of lake, &c.
22	9	2	do .....	1886	do
21	10	2	do .....	1886	do
22	10	2	do .....	1886	do
42	27	2	A. C. Webb .....	1886	Remeasurement of lines
25	29	2	do .....	1886	Posts removed, &c.
26	29	2	do .....	1886	do
27	29	2	do .....	1886	do
46	19	3	Joseph Doupe.. . . .	1886	North boundary re-surveyed.
48	28	2	do .....	1886	Resurvey of north-east portion of township.
49	28	2	do .....	1886	do portion of township.
45	21	2	do .....	1886	Traverse in south-west corner of township.
45	22	2	do .....	1886	do south-east do
47 A	25	2	do .....	1886	Traverse of South Saskatchewan River.
44	4	3	do .....	1886	Survey of Hudson Bay Company's Reserve.
45	4	3	do .....	1886	do do
50	25	3	do .....	1886	Resurvey of portion of east outline.
49	25	3	do .....	1886	do Section 24.
39	27	4	do .....	1886	Examination survey of part of township.
54	26	4	do .....	1886	Traverse in Section 31.
42	13	3	do .....	1886	Resurvey of north boundary.
42	14	3	do .....	1886	do do and some section lines.
43	14	3	do .....	1886	do north and south boundaries.
44	13	3	do .....	1886	do outline.
44	14	3	do .....	1886	do do
21	22	2	J. S. Dennis.. . . .	1886	Traverse of Long Lake.
21	23	2	do .....	1886	do
8	1	3	do .....	1886	Posts moved.
16	13	3	do .....	1886	Position of Canadian Pacific Railway determined.
10	25	23	do .....	1886	Iron bar at north-west corner moved.
18	29	3	do .....	1886	Mound built.
19	27	3	do .....	1886	do moved.
18	3	4	do .....	1886	Position of South Saskatchewan River determined.
13	5	4	do .....	1886	do do
12	7	4	do .....	1886	do do
13	12	4	do .....	1886	do do
10	12	4	do .....	1886	Iron bar at north-east corner corrected for error.
15	5	4	do .....	1886	Position of river determined.
17	5	4	do .....	1886	do do and river lot posts and mounds removed.
19	2	4	do .. . . .	1886	Position of river determined and river lot posts and mounds removed.
19	3	4	do .....	1886	Resurvey of west outline.
19	4	4	do .....	1886	do east do
20	1	4	do .....	1886	Position of river determined.
22	1	4	do .....	1886	do do
22	2	4	do .....	1886	do do
22	4	4	do .....	1886	do do
23	3	4	do .....	1886	do do
4	30	4	do .....	1886	Part of second base line re-chained.
16	5	4	do .....	1886	River lot posts and mounds removed.
17	4	4	do .....	1886	do do
23	7	4	do .....	1886	Survey of part of south boundary.
42	13	3	J. McAree.. . . .	1887	Resurvey of certain section lines.
43	14	3	do .....	1887	do part of east and north outlines.
44	14	3	do .....	1887	do east and north outlines.
46	18	3	do .....	1887	do north outline.
43	19	3	do .....	1887	do part of east outline.
44	19	3	do .....	1887	do east outline.
48	25	3	do .....	1887	Substituting iron for wooden posts.
51	26	3	do .....	1887	Resurvey of correction line.
54	27	3	do .....	1887	do do
54	14	4	do .....	1887	do part of north outline.
51	17	4	do .....	1887	do Sections 5 and 8.



SCHEDULE (No. 24) of Correction Surveys performed, &c.—*Continued.*

Township.	Range.	Meridian.	By whom Performed.	Year.	Description of Work.
53	18	4	J. McAree.. .. .	1887	Resurvey of east outline.
55	19	4	do .....	1887	do south outline.
55	18	4	do .....	1887	do do
46	21	4	do .....	1887	do east outline.
56	20	4	do .....	1887	do north outline.
45	24	4	do .....	1887	Substituting iron for wooden posts.
47	24	4	do .....	1887	do do
48	24	4	do .....	1887	do do
47	25	4	do .....	1887	do do
48	25	4	do .....	1887	do do
51	25	4	do .....	1887	Resurvey of north outline.
55	25	4	do .....	1887	do east do
56	25	4	do .....	1887	do part of east outline.
55	26	4	do .....	1887	do east outline.
56	26	4	do .....	1887	do do
39	27	4	do .....	1887	do Interior Meridian line.
31	28	4	do .....	1887	Measurement of closings.
36	28	4	do .....	1887	Position of Red Deer River determined.
50	28	4	do .....	1887	Resurvey of east boundary of Sections 3, 10, 15, 22, 27 and 34.
52	28	4	do .....	1887	do north outline.
34	1	5	do .....	1887	Checked closing on correction line.
35	1	5	do .....	1887	Checked position of $\frac{1}{4}$ section post on north boundary.
52	1	5	do .....	1887	Resurvey of certain section lines.
21	7	4	J. S. Dennis.. .. .	1887	Interior lines re-chained.
22	7	4	do .....	1887	do re-measured.
21	8	4	do .....	1887	do re-chained.
22	8	4	do .....	1887	do re-measured.
21	9	4	do .....	1887	do re-chained.
21	12	4	do .....	1887	Position of river determined.
10	16	4	do .....	1887	Resurvey of north boundary.
11	16	4	do .....	1887	do south do
10	17	4	do .....	1887	do north do
11	17	4	do .....	1887	do south do
26	17	4	do .....	1887	Position of river determined.
26	21	4	do .....	1887	Resurvey of north boundary.
8	26	4	do .....	1887	do west outline.
22	26	4	do .....	1887	do north boundary.
23	26	4	do .....	1887	do south do
21	27	4	do .....	1887	East outline re-traced and re-measured.
22	27	4	do .....	1887	Resurvey of north boundary.
23	27	4	do .....	1887	do south do
20	28	4	do .....	1887	Wooden posts replaced by iron on north boundary.
30	28	4	do .....	1887	Iron bar and mound at north-east corner on correction line moved to correct position.
31	28	4	do .....	1887	Resurvey of south boundary.
20	29	4	do .....	1887	Wooden posts replaced by iron on north boundary.
22	29	4	do .....	1887	Resurvey of west boundary of Sections 20, 29 and 32.
23	29	4	do .....	1887	Position of Bow River determined.
4	30	4	do .....	1887	Resurvey of north boundary and part of west boundary.
5	30	4	do .....	1887	do west boundary, (5th Initial Meridian.)
6	30	4	do .....	1887	do do do and part of north boundary.
7	30	4	do .....	1887	Resurvey of west boundary, (5th Initial Meridian,) and part of south boundary.
8	30	4	do .....	1887	Resurvey of west boundary, (5th Initial Meridian.)
7	1	5	do .....	1887	do south boundary.
22	23	2	do .....	1887	Traverse of shore to Long Lake.
19	12	3	do .....	1887	River lot-posts and mounds removed.
19	15	3	do .....	1887	do do
19	16	3	do .....	1887	do do
19	17	3	do .....	1887	do do
20	8	3	do .....	1887	do do
20	9	3	do .....	1887	do do
20	10	3	do .....	1887	do do
20	12	3	do .....	1887	do do
20	13	3	do .....	1887	do do
20	14	3	do .....	1887	do do

SCHEDULE (No. 24) of Correction Surveys performed, &c.—*Continued.*

Township.	Range.	Meridian.	By whom Performed.	Year.	Description of Work.
20	15	3	J. S. Dennis.....	1887	River lot-posts and mounds removed.
20	16	3	do .....	1887	do do
21	17	3	do .....	1887	do do
21	7	3	do .....	1887	do do
21	8	3	do .....	1887	do do
21	9	3	do .....	1887	do do
21	17	3	do .....	1887	do do
21	18	3	do .....	1887	do do
22	7	3	do .....	1887	do do
22	8	3	do .....	1887	do do
22	18	3	do .....	1887	do do
22	19	3	do .....	1887	do do
23	7	3	do .....	1887	do do
23	19	3	do .....	1887	do do
23	20	3	do .....	1887	do do
23	21	3	do .....	1887	do do
23	22	3	do .....	1887	do do
23	23	3	do .....	1887	do do
23	24	3	do .....	1887	do do
23	25	3	do .....	1887	do do
23	26	3	do .....	1887	do do
24	5	3	do .....	1887	do do
24	6	3	do .....	1887	do do
24	7	3	do .....	1887	do do
24	21	3	do .....	1887	do do
24	22	3	do .....	1887	do do
24	23	3	do .....	1887	do do
24	24	3	do .....	1887	do do
25	5	3	do .....	1887	do do
25	6	3	do .....	1887	do do
26	6	3	do .....	1887	do do
26	7	3	do .....	1887	do do
27	7	3	do .....	1887	do do
28	7	3	do .....	1887	do do
28	8	3	do .....	1887	do do
8	21	4	do .....	1887	do do
9	21	4	do .....	1887	do do
9	24	4	do .....	1887	do do
9	27	4	do .....	1887	do do
10	16	4	do .....	1887	do do
10	17	4	do .....	1887	do do
10	20	4	do .....	1887	do do
10	25	4	do .....	1887	do do
12	5	4	do .....	1887	do do
12	6	4	do .....	1887	do do
12	7	4	do .....	1887	do do
12	12	4	do .....	1887	do do
13	6	4	do .....	1887	do do
13	7	4	do .....	1887	do do
13	8	4	do .....	1887	do do
13	14	4	do .....	1887	do do
14	13	4	do .....	1887	do do
13	5	4	do .....	1887	do do
13	12	4	do .....	1887	do do
13	13	4	do .....	1887	do do
14	5	4	do .....	1887	do do
14	14	4	do .....	1887	do do
14	15	4	do .....	1887	do do
14	16	4	do .....	1887	do do
15	5	4	do .....	1887	do do
15	15	4	do .....	1887	do do
15	16	4	do .....	1887	do do
16	5	4	do .....	1887	do do
16	16	4	do .....	1887	do do
17	3	4	do .....	1887	do do
17	4	4	do .....	1887	do do

SCHEDULE (No. 24) of Correction Surveys performed, &c.—*Continued.*

Township.	Range.	Meridian.	By whom Performed.	Year.	Description of Work.
17	5	4	J. S. Dennis.....	1887	River lot-posts and mounds removed.
17	16	4	do .....	1887	do do
17	17	4	do .....	1887	do do
17	18	4	do .....	1887	do do
18	18	4	do .....	1887	do do
19	18	4	do .....	1887	do do
21	25	4	do .....	1887	do do
21	26	4	do .....	1887	do do
21	27	4	do .....	1887	do do
21	28	4	do .....	1887	do do
22	1	4	do .....	1887	do do
22	2	4	do .....	1887	do do
22	3	4	do .....	1887	do do
22	4	4	do .....	1887	do do
22	5	4	do .....	1887	do do
22	6	4	do .....	1887	do do
22	15	4	do .....	1887	do do
22	25	4	do .....	1887	do do
22	28	4	do .....	1887	do do
22	29	4	do .....	1887	do do.
23	1	4	do .....	1887	do do
23	2	4	do .....	1887	do do
23	3	4	do .....	1887	do do
23	4	4	do .....	1887	do do
23	7	4	do .....	1887	do do
23	8	4	do .....	1887	do do
23	15	4	do .....	1887	do do
23	29	4	do .....	1887	do do
24	29	4	do .....	1887	do do
37	28	4	do .....	1887	do do
45	19	4	do .....	1887	do do
45	20	4	do .....	1887	do do
45	22	4	do .....	1887	do do
45	23	4	do .....	1887	do do
46	22	4	do .....	1887	do do
50	26	4	do .....	1887	do do
51	26	4	do .....	1887	do do
23	14	4	do .....	1887	do do
46	20	4	do .....	1887	do do
46	21	4	do .....	1887	do do
22	1	5	do .....	1887	do do
23	1	5	do .....	1887	do do
24	1	5	do .....	1887	do do
24	2	5	do .....	1887	do do
8	22	4	do .....	1887	do do
8	24	4	do .....	1887	do do
8	25	4	do .....	1887	do do
9	22	4	do .....	1887	do do
9	23	4	do .....	1887	do do
9	25	4	do .....	1887	do do
9	26	4	do .....	1887	do do
11	11	4	do .....	1887	do do
11	12	4	do .....	1887	do do
11	13	4	do .....	1887	do do
12	8	4	do .....	1887	do do
12	10	4	do .....	1887	do do
12	11	4	do .....	1887	do do
12	13	4	do .....	1887	do do
13	9	4	do .....	1887	do do
13	10	4	do .....	1887	do do
22	10	4	do .....	1887	do do
22	12	4	do .....	1887	do do
22	14	4	do .....	1887	do do
26	1	2	J. J. Dalton.....	1887	Traverse of lake in section 7.
27	1	2	do .....	1887	Traverse of lake.
29	1	2	do .....	1887	Traverse of lake in sections 3, 4, 5, 7, 9 and 21.
26	2	2	do .....	1887	do 7, 12, 13 and 18.
23	3	2	do .....	1887	do 4 and 9.



## SCHEDULE (No. 24) of Correction Surveys performed, &amp;c.—Continued.

Township.	Range.	Meridian.	By whom Performed.	Year.	Description of Work.
24	14	4	J. S. Dennis	1887	Removal of river lot, posts and mound.
22	13	4	do	1887	do do
21	10	4	do	1887	do do
21	12	4	do	1887	do do
21	11	4	do	1887	do do
17	20	1	J. Vicars	1888	Lost corners re-established.
16	22	1	do signed by J.S.D.	1888	Verification of water area.
26	1	2	do	1888	do
27	1	2	do	1888	do
29	1	2	do	1888	do
26	2	2	do	1888	do
23	3	2	do	1888	do
18	8	2	do	1888	Resurvey of Meridian.
18	9	2	do	1888	Boundaries of certain sections remeasured.
19a	9	2	do	1888	Resurvey of east boundary.
19a	11	2	do	1888	Boundaries of certain sections remeasured.
21	13	2	do	1888	do do
3	27	2	do	1888	Resurvey of south boundary.
4	3	3	do	1888	Resurvey of east and west lines through township.
25	3	3	do	1888	Resurvey of east boundary.
6	17	1	A. Driscoll, Jun	1888	Verification of water areas.
11	17	1	do	1888	Resurvey in sections 2 and 3.
1	25	4	do	1888	Resurvey of east boundary.
2	25	4	do	1888	do
37	27	4	do	1888	Verifications of water areas.
38	27	4	do	1888	do
39	27	4	do	1888	do
1	28	4	do	1888	Survey of tie lines between International boundary and 5th Initial Meridian.
2	28	4	do	1888	Resurvey for tie line between International boundary and 5th Initial Meridian.
3	28	4	do	1888	do do
4	28	4	do	1888	do do
36	28	4	do	1888	Verification of water areas surveys.
37	28	4	do	1888	do do
38	28	4	do	1888	do do
4	29	4	do	1888	Certain boundaries resurveyed re tie between International boundary and 5th Initial Meridian.
4	30	4	do	1888	do do
30	3	5	do	1888	Resurvey of north boundary.
31	3	5	do	1888	do south do
30	4	5	do	1888	do north do
31	4	5	do	1888	do south and east boundaries.
28	6	5	do	1888	North boundary of section 31 remeasured.
21	1	4	C.F. Leclerc, sig. by J.S.D.	1888	River lot posts and mounds removed.
18	4	4	do	1888	Resurvey of east and north boundaries.
18	5	4	do	1888	do east boundary.
19	4	4	do	1888	do south do
19	5	4	do	1888	do east do
21	7	4	do	1888	Lakes and river traversed.
22	7	4	do	1888	do
21	8	4	do	1888	do
22	8	4	do	1888	do
21	9	4	do	1888	do
21	10	4	do	1888	River lot posts and mounds removed.
22	10	4	do	1888	do do
21	11	4	do	1888	do do
21	12	4	do	1888	do do
22	12	4	do	1888	do do
22	13	4	do	1888	do do
22	14	4	do	1888	do do
23	14	4	do	1888	do do
24	14	4	do	1888	do do
24	15	4	do	1888	do do
25	15	4	do	1888	do do
25	16	4	do	1888	do do
26	16	4	do	1888	do do

SCHEDULE (No. 24) of Correction Surveys performed, &c.—*Continued.*

Township.	Range.	Meridian.	By whom Performed.	Year.	Description of Work.
26	17	4	C. F. Leclerc signed by J. S. Dennis .....	1888	River lot posts and mounds removed.
19	19	4	do .....	1888	Resurvey of east boundary.
20	1	4	D. C. O'Keeffe signed by J. S. Dennis .....	1888	River lot posts and mounds on east side of river removed.
19	2	4	do .....	1888	River lot posts and mounds removed.
20	2	4	do .....	1888	do do
18	3	4	do .....	1888	do do
19	3	4	do .....	1888	River lot posts and mounds on east side of river removed.
18	4	4	do .....	1888	River lot posts and mounds removed.
*12	5	4	do .....	1888	Placing pits on Medicine Hat and Dunmore trail.
12	8	4	do .....	1888	River lot posts and mounds removed.
13	9	4	do .....	1888	do do
12	10	4	do .....	1888	do do
13	10	4	do .....	1888	do do
11	11	4	do .....	1888	do do
12	11	4	do .....	1888	do do
11	12	4	do .....	1888	do do
11	13	4	do .....	1888	do do
11	14	4	do .....	1888	do do
11	15	4	do .....	1888	do do
11	16	4	do .....	1888	do do
12	16	4	do .....	1888	do do
9	22	4	do .....	1888	do do
48	24	2	J. L. Reid .....	1888	North boundaries sections 32, 33, 34 and 35, and east boundaries of 35 and 36 resurveyed.
45a	26	2	do .....	1888	Posts and mounds of old system removed.
44	27	2	do .....	1888	Posts and mounds of erroneous survey removed.
45a	27	2	do .....	1888	Posts and mounds of old system removed.
45	27	2	do .....	1888	North boundary of section 6 resurveyed and posts on south boundary corrected.
45a	28	2	do .....	1888	Posts and mounds of old system removed.
45	28	2	do .....	1888	Posts on south boundary of Township corrected.
49	1	4	P. R. A. Belanger .....	1888	Resurvey of east boundary.
50	1	4	do .....	1888	do
51	1	4	do .....	1888	do
52	1	4	do .....	1888	do
53	1	4	do .....	1888	do
54	1	4	do .....	1888	do
55	1	4	do .....	1888	do
55	18	4	do .....	1888	Resurvey of north boundary.
55	20	4	do .....	1888	do
55	23	4	do .....	1888	Resurvey of 13th correction line.
55	24	4	do .....	1888	do
55	25	4	do .....	1888	do
25	1	5	do .....	1888	Resurvey of east boundary.
26	1	5	do .....	1888	do
27	1	5	do .....	1888	do
28	1	5	do .....	1888	do
29	1	5	do .....	1888	do
30	1	5	do .....	1888	do
31	1	5	do .....	1888	do
32	1	5	do .....	1888	do
33	1	5	do .....	1888	do
34	1	5	do .....	1888	do
35	1	5	do .....	1888	do
36	1	5	do .....	1888	do
37	1	5	do .....	1888	do
38	1	5	do .....	1888	do
39	1	5	do .....	1888	do
40	1	5	do .....	1888	do
41	1	5	do .....	1888	do
42	1	5	do .....	1888	do
43	1	5	do .....	1888	do

\* No plan.

SCHEDULE (No. 24) of Correction Surveys performed, &c.—*Concluded.*

Township.	Range.	Meridian.	By whom Performed.	Year.	Description of Work.
44	1	5	P. R. A. Belanger ..	1888	Resurvey of east boundary.
45	1	5	do .....	1888	do
46	1	5	do .....	1888	do
47	1	5	do .....	1888	do
48	1	5	do .....	1888	do
49	1	5	do .....	1888	do
50	1	5	do .....	1888	do
51	1	5	do .....	1888	do
52	1	5	do .....	1888	do
40	2	5	do ..	1888	do
45	27	2	C. F. Leclerc ..	1888	Establishing river lots.
45	28	2	do .....	1888	do
45	1	3	do .....	1888	do
43	1	3	do .....	1888	do
44	1	3	do .....	1888	do
46 <sup>a</sup>	26	2	J. L. Reid .....	1888	Posts and mounds of old system removed.
24	1	5	J. S. Dennis .....	1888	Road survey in north $\frac{1}{2}$ section 22.
+23	1	5	do .....	1888	Resurvey of east boundaries of sections 1 and 12.
46 <sup>a</sup>	25	2	J. L. Reid .....	1888	Part of correction line.
42	27	2	do .....	1888	Correction line.
24	10	5	A. Saint Cyr .....	1888	Showing removal of posts.
27	19	5	J. I. Dufresne .....	1888	Correction on south boundary sections 3 and 4.

+Only notes.

## SCHEDULE (No. 25) showing the acreage of Dominion Lands surveyed during each year from 1869 to 1888 inclusive.

Year.	Acres.	Number of Farms of 160 Acres.
1869 .....	58,080	Area posted on block lines under 1st system; posts and mounds subsequently removed.
1870 .....	None.	
1871 .....	1,239,400	7,746
1872 .....	3,552,771	22,240
1873-74 .....	4,237,864	26,487
1875 .....	665,000	4,156
1876 .....	420,507	2,628
1877 .....	231,691	1,448
1878 .....	306,936	1,918
1879 .....	1,130,482	7,066
1880 .....	4,472,000	27,950
1881 .....	9,147,000	50,919
1882 .....	9,460,000	55,125
1883 .....	27,000,000	168,750
1884 .....	6,400,000	40,000
1885 .....	1,379,010	8,620
1887 .....	643,710	4,023
1888 .....	1,131,840	7,074



SCHEDULE (No. 26) of Settlement, Town Plot and miscellaneous surveys performed in Manitoba, Keewatin, North-West Territories and British Columbia.

Description of Survey.	By whom Surveyed.	Year.
Parish of St. Peter's, Red River, Manitoba.	A. H. Vaughan.	1873
do St. Clement's do	do	1872-3
do St. Andrew's do	do	1872-3
do St. Paul's do	Duncan Sinclair.	1871-2
do Kildonan do		
do St. John, Red and Assiniboine Rivers, Manitoba	Duncan Sinclair and Geo. McPhillips.	1872-3
do St. James, Assiniboine River, Manitoba		
do St. Charles do	Duncan Sinclair and G. McPhillips.	1872-3
do Headingly do		
do St. Francois Xavier do	Geo. McPhillips.	1871
do Baie St. Paul do	Wm. Wagner.	1874
do Poplar Point do	do	1874
do High Bluff do	Geo. McPhillips.	1874-5
Oak Point Settlement, Manitoba.	Wm. Wagner.	1872-4
Parish of Portage la Prairie, Assiniboine River, Manitoba.	Geo. McPhillips.	1874-5
do St. Boniface, Red River, Manitoba.	Duncan Sinclair and G. McPhillips.	1872-3
do St. Vital do	Geo. McPhillips.	1874
do St. Norbert do	do	1875
do Ste Agathe do	(F. A. Martin.	1873-4
do Lorette, River Seine, Manitoba.	Geo. McPhillips.	1874-5
Settlement of Ste Anne do	do	1877
do St. Laurent, Lake Manitoba, Manitoba.	do	1873
Selkirk town plot, Red River, Manitoba.	W. Wagner.	1872-4
Gimli do Lake Winnipeg, Manitoba.	J. W. Harris.	1875
Prince Albert settlement, North Saskatchewan River, N.-W.T.	Geo. McPhillips.	1875
St. Laurent do South do	Mont. Aldous.	1878
Battleford town plot, Battle River, N.-W.T.		
Fort Saskatchewan settlement, North Saskatchewan River, N.-W.T.	A. G. Cavana.	1882
Edmonton settlement, North Saskatchewan River, N.-W.T.	M. Deane.	1883
St. Albert settlement, Big Lake and Sturgeon River, N.-W.T.	do	1882
Fort Macleod town plot, Old Man's River, North-West Territories.	do	1883
Silver City town plot, Canadian Pacific Ry., Bow Pass, N.W. Territories.	A. W. McVittie.	1883
Rat River settlement, Manitoba.	F. L. Foster.	1883
Oak Island do	do	1883
Silverton, Canadian Pacific Railway, Bow Pass, N.-W. Territories.	P. R. A. Belanger.	1885
Donald town plot do Columbia River, British Columbia	do	1885
Golden town plot do do do	do	1885
Morleyville settlement, Bow River, North-West Territories.	do	1885
Calgary villa lots and boulevard, Calgary North-West Territories	do	1885
Grand Pointe settlement, Manitoba.	M. J. Charbonneau.	1884
St. Malo settlement, Manitoba.	do	1884
Whitemouth town plot, Canadian Pacific Ry., Manitoba	J. I. Dufresne.	1885
Rat River settlement, Manitoba.	do	1885
Donald town plot, Canadian Pacific Railway, British Columbia.	W. A. Ducker.	1887
Fort Saskatchewan settlement, North-West Territories.	Tom Kains.	1884
Victoria settlement.	do	1884
Extension to St. Albert settlement.	J. J. McArthur.	1884
Calgary town plot.	A. W. McVittie.	1884
Manitoba House settlement.	A. H. McDougall.	1885
Banff town plot.	G. A. Stewart.	1886
Illicillewaet town plot.	P. R. A. Belanger.	1887
Mounted Police reserves, North-West Territories.	C. F. Miles.	1887
Methodist mission reserves do	F. W. Wilkins.	1887
Canadian Pacific Ry. station grounds at Griffin Lake, British Columbia	— Poudrier.	1887
do do Palliser do	Jos. Doupe.	1888
Hudson Bay Company's land at Athabasca Landing, N.W. Territories.	J. A. Macmillan.	1888
School section, south half of 29, township 13, range 19—1st.	J. H. Brownlee.	1887
Industrial school and R. C. mission grants, in township 21, range 13—2.	C. C. DuBerger.	1885
Part of section 11, township 12, range 8—1st.	Jno. De Cew.	1884
Reserve for Regina reservoir.	T. S. Gore.	1885
Hudson Bay Company's Islands, Moose River.	M. Aldous.	1883
Boundaries of the Rocky Mountains Park	A. St. Cyr.	1887
Survey of timber limits on Rainy Lake.	D. Sinclair.	1874

SCHEDULE (No. 26) of Settlement, Town Plot and miscellaneous Surveys—*Con.*

Description of Survey.	By whom Surveyed.	Year.
Survey of part of west coast of Lake Winnipeg .....	A. H. Vaughan .....	1875
Survey of outer two miles in St. Andrew's and St. Clement's .....	do .....	1875
do do St. Norbert, St. Vital, St. Boniface and St. Charles .....	F. A. Martin .....	1874
do do Parishes of St. François Xavier and Headingly .....	Wm. Pearce .....	1874
Survey of portion of Lake Manitoba .....	Wm. Wagner .....	1873
Traverse of part of shore line and islands, Lake of the Woods .....	A. L. Russell .....	1874
Survey of part of Red River and portion of coast line, Lake Winnipeg .....	A. H. Vaughan .....	1873
White Mud River settlement .....	Wm. Wagner .....	1871
Survey of settlement along Red River, Dease's Farm to Pembina .....	L. J. D'Auteuil .....	1872
Survey of Red River from John Tait's to Indian Reserve .....	D. S. Doucett .....	1872
Survey of Red River .....	D. S. Baudry .....	1872
Survey of shore line of Lake Manitoba and adjacent marshes, from provincial boundary to Manitoba House .....	Wm. Wagner .....	1873
Survey of timber limits on Lake of the Woods .....	L. Kennedy .....	1875
Traverse of part of Lake of the Woods, Sabbaskon district .....	C. F. Miles .....	1876
Survey of villages of Riverton and Sandy Bar, Manitoba .....	G. McPhillips .....	1876
Survey of outer two miles in Parishes of St. Andrew's, St. Clement's, St. Boniface, Kildonan and St. Paul .....	Wm. Pearce .....	1876
Survey of Qu'Appelle River to Upper Fishing Lake .....	Wm. Wagner .....	1876
Outer two miles in Parishes of Headingly, St. François Xavier and Baie St. Paul .....	G. McPhillips .....	1875
Traverse of Big Island, Lake Winnipeg .....	L. Kennedy .....	1875
Traverse of Steep Rock Island, Lake of the Woods .....	do .....	1875
Town plot of Gimli and parts adjacent to Icelandic settlement .....	G. McPhillips .....	1875
Survey of part of shore line, Lake of the Woods from Dog Point westward .....	Geo. A. Bayne .....	1875
Traverse of White Fish Bay, Lake of the Woods .....	C. F. Miles .....	1875
Survey of outer two miles in Parishes of St. John, St. James, St. Charles (north) and St. Paul (west) .....	J. W. Harris .....	1876
Survey of Penitentiary Reserve in Township 13, Range 3, east of Principal Meridian .....	Wm. Pearce .....	1877
Traverse of portion of Lake Winnipeg .....	do .....	1877
Survey of north side of Assiniboine River from Mission Farm, west .....	M. McFadden .....	1871
Resurvey of part of Parish of Ste. Agathe .....	Jos. Doupe .....	1873
Survey of timber limits north of Prince Albert .....	J. L. Reid .....	1879
do connecting astronomical station with Government House, Battleford .....	Wm. Ogilvie .....	1878
Traverse of part of Assiniboine and Souris Rivers .....	Caddy and Hewson .....	1880
Survey of claims and holdings at Battleford .....	J. L. Reid .....	1879
do of lakes in Township 1, Range 22, west of Principal Meridian .....	Jno. McAre .....	1879
Traverse of lakes in Townships 18 and 19, Ranges 19 and 20, west of Principal Meridian .....	G. A. Stewart .....	1879
Traverse of part of South Saskatchewan River .....	Hugh Wilson .....	1882
Survey of Old Man's River from Fort McLeod, east .....	J. C. Nelson .....	1878
do portion of North and South Saskatchewan Rivers .....	J. L. Reid .....	1878
Timber limit on Lake Winnipegosis and Water Hen Rivers .....	G. C. Rainboth .....	1878
do Winnipeg River .....	A. G. Forrest .....	1880
Survey of claims near 3rd crossing of Souris River .....	J. W. Vaughan .....	1879
Resurvey of part of International boundary at crossing of Kennebec Road .....	W. A. Ashe .....	1881
Resurvey, Battleford town plot .....	R. C. Laurie .....	1883
Traverse of part of Lake of the Woods .....	John McLatchie .....	1881
Survey of part of lot 35, Parish of St. John .....	G. McPhillips .....	1884
do Goose Island, Lake Winnipeg .....	do .....	1887
Traverse of part North Saskatchewan River .....	F. Vincent .....	1884
do St. Mary's, Belly and Little Bow Rivers .....	E. Bray .....	1886
Survey of C. P. R. line in Bow Pass of Rocky Mountains .....	Thos. Fawcett .....	1884

## SCHEDULE No. 27.

## LIST OF DOMINION LAND AND TOPOGRAPHICAL SURVEYORS.

These are corrected up to date of the last meeting of the Board of Examiners in August, 1891. Where the date of commission is given as 14th April, 1872, it indicates that such surveyor was a surveyor of Provincial Lands in one of the provinces of Canada before that date and became a Dominion Land Surveyor by operation of the Dominion Lands Act of 1872. In the other cases the date of commission issued by the Dominion Board of Examiners is given.

The lists have been prepared by Mr. P. B. Symes, Secretary of the Board of Examiners for Dominion Land and Topographical Surveyors from the lists of Provincial Surveyors furnished by the proper officers of the provinces, and from the records of the Dominion Board.

## LIST of Dominion Topographical Surveyors.

Name.	Date of Commission.	Name.	Date of Commission.
Aldous, Montague.....	May 15, 1878	King, Wm. Fred.....	Nov. 21, 1876
Ashe, Wm. A.....	Nov. 19, 1877	Klotz, Otto Julius.....	do 19, 1877
Aylen, Chas. P.....	May 20, 1878	Magrath, Chas. Alex.....	Mar. 31, 1882
Dalton, John Joseph.....	Nov. 17, 1881	McAree, John.....	May 15, 1884
Dennis, John Stoughton.....	do 19, 1877	Patrick, Allen P.....	Nov. 19, 1877
Deville, Edouard.....	do 19, 1877	Stewart, Louis B.....	Feb. 23, 1887
Drummond, Thos.....	April 2, 1883	Thompson, Wm. T.....	Nov. 19, 1877
Dufresne, Joseph I.....	do 2, 1883	White, Geo. M.....	Feb. 21, 1889
Fawcett, Thos.....	Nov. 19, 1877	Wilkins, Fred. W.....	May 18, 1881
Galbraith, John.....	do 19, 1877		

## LIST of Dominion Land Surveyors.

Name.	Date of Commission.	Name.	Date of Commission.
Abrey, Geo. B.....	April 14, 1872	Battersby, Leslie Chas.....	April 14, 1872
Addie, James.....	do 14, 1872	Bayne, Geo. A.....	do 14, 1872
Aldous, Montague.....	May 15, 1878	Bazette, Edward.....	Nov. 14, 1881
Allan, James.....	April 14, 1872	Beasley, Geo. Hills.....	Nov. 12, 1878
Ambrose, Chas.....	do 14, 1872	Beatty, Walter.....	April 14, 1872
Anderson, Jas.....	do 14, 1872	Beatty, David.....	do 14, 1872
Arcand, Louis.....	do 14, 1872	Beaudry, J. A. U.....	do 14, 1872
Armstrong, Francis W.....	do 14, 1872	Belanger, Fred.....	do 14, 1872
Ashe, Wm. A.....	Nov. 19, 1877	Belanger, C. A.....	do 14, 1872
Austin, Geo. Fred.....	do 14, 1872	Belanger, P. R. A.....	May 17, 1880
Austin, Wm. A.....	do 14, 1872	Belanger, Jules.....	April 14, 1872
Aylen, Chas.....	May 29, 1885	Bell, Wm.....	do 14, 1872
Aylen, John.....	do 20, 1878	Bell, Andrew.....	do 14, 1872
Aylsworth, Chas. Fraser.....	April 14, 1872	Belleau, Joseph A.....	May 15, 1883
Aylsworth, Chas. Fraser, jun.....	May 17, 1886	Bemister, Geo. Bartlett.....	June 11, 1878
Aylsworth, Wm. Robt.....	April 14, 1872	Berlinguet, Thos.....	Nov. 19, 1877
Aylsworth, John Sidney.....	do 14, 1872	Berryman, Edgar.....	April 14, 1872
Baikie, John Donald.....	do 14, 1872	Bigger, Chas. Albert.....	Mar. 30, 1882
Baillarge, Chas. P. F.....	do 14, 1872	Biggs, J. M. M.....	May 17, 1886
Baillarge, Geo. F.....	do 14, 1872	Bignell, John.....	April 14, 1872
Ball, Jesse P.....	do 14, 1872	Blacklock, F. W.....	do 14, 1872
Ball, Geo. A.....	do 14, 1872	Blake, Frank Lever.....	Mar. 28, 1882
Balzaretti, Antoine A.....	May 15, 1883	Boisvert, F.....	April 14, 1872
Barnard, Jas.....	April 14, 1872	Boivin, Elzear.....	Nov. 13, 1883
Barret, Wm.....	do 14, 1872	Bolger, Thos. Oliver.....	April 14, 1872
Barthelet, Gédéon.....	do 14, 1872	Bolger, Francis.....	do 14, 1872



LIST of Dominion Land Surveyors—*Continued.*

Name.	Date of Commission.	Name.	Date of Commission.
Bolton, Jesse Nunne.	April 14, 1872	Chipman, Willis	May 21, 1881
Bolton, Lewis	do 14, 1872	Cleaver, Jas.	April 14, 1872
Booth, Chas. Ed.	Mar. 30, 1883	Cleeve, Fred. Chas.	do 14, 1872
Bouchette, Chas. J.	April 14, 1872	Clements, Edgar	do 14, 1872
Boulton, Wm.	do 14, 1872	Cleveland, Henry C.	do 14, 1872
Boulton, Arthur	do 14, 1872	Cleveland, F. A.	do 14, 1872
Boulton, Hen. Carew	do 14, 1872	Conger, John O.	do 14, 1872
Bourgault, C. E.	Feb. 21, 1888	Cooke, Richard P.	do 14, 1872
Bourgeault, Armand.	Mar. 29, 1883	Corey, Lindel	do 14, 1872
Bourgeois, John	do 30, 1882	Corey, Lindel	do 14, 1872
Bourgeois, Ben.	May 13, 1886	Côté, Jos. Adelard	May 14, 1884
Bourget, Chas. Arthur	do 14, 1884	Côté, J. L.	Mar. 21, 1890
Bourne, Robt.	June 17, 1875	Cotton, Arthur F.	May 11, 1880
Bowman, A. M.	Feb. 16, 1888	Cozens, Jos.	do 9, 1881
Boyce, Geo.	April 14, 1872	Crawford, Wm.	June 17, 1875
Brabazon, S. L.	do 14, 1872	Crawford, Wm.	April 12, 1883
Brabazon, Alfred Jas.	May 12, 1882	Creswick, Henry	do 14, 1872
Brady, Jas.	April 14, 1872	Crickmore, Arthur J.	do 14, 1872
Bray, Edgar	do 14, 1872	Cromwell, Jos. M. O.	do 14, 1872
Bray, Harry Freeman	Nov. 15, 1880	Crowe, Walter	do 14, 1872
Bray, Samuel	do 14, 1883	Daintry, John	do 14, 1872
Breen, Thos.	April 14, 1872	Dalton, John Jos.	do 17, 1879
Bristow, Arthur	do 14, 1872	Daly, Patrick	do 14, 1872
Brodie, Samuel	do 14, 1872	D'Amours, Jos. Wilfrid	May 10, 1882
Brown, David R.	do 14, 1872	Daniell, John D.	April 14, 1872
Brown, John Smith	Nov. 12, 1878	Davidson, Alex.	do 14, 1872
Brown, David Benjamin	Feb. 13, 1890	Davidson, John	do 14, 1872
Browne, John O.	April 14, 1872	Davies, Chas. Lennon	do 14, 1872
Brownlee, J. H.	do 15, 1887	Deane, Michael	do 14, 1872
Bruce, Geo.	do 14, 1872	Deans, W. J.	May 13, 1886
Bruce, John S.	do 14, 1872	DeCew, Edmund	April 14, 1872
Brumelle, Finlay E.	Mar. 30, 1882	DeCew, John	do 14, 1872
Burchill, John	do 30, 1882	Dechesne, Ludger M.	Mar. 28, 1883
Burke, Joseph W.	April 14, 1872	DeCourval, Louis P.	May 15, 1883
Burke, Wm.	do 14, 1872	Demers, Jean M. A.	do 10, 1882
Burke, Jos.	Nov. 21, 1882	Denison, John	April 14, 1872
Burke, Wm. Robt.	May 13, 1886	Dennehy, Thos. J.	do 14, 1872
Burnet, Peter	April 14, 1872	Dennis, John Stoughton	Nov. 19, 1877
Burnet, Hugh	June 22, 1885	Denny, Herbert C.	April 1, 1882
Burns, Robt. Taylor	April 14, 1872	Dery, Ignace Pierre	do 14, 1872
Burns, Thos.	do 14, 1872	Desjardins, Cléophas	May 18, 1881
Burton, Richard G.	do 14, 1872	Desmeules, Jean, Célestin	April 14, 1872
Burwell, H. M.	Feb. 17, 1887	Deville, Edouard	Nov. 19, 1877
Butler, Matt. Jos.	May 15, 1880	Dickson, Jas.	April 14, 1872
Byrne, Thos.	April 14, 1872	Dickson, H. G.	Mar. 19, 1889
Caddy, Edward C.	do 14, 1872	Dion, C. A.	April 14, 1872
Caddy, Cyprian Fras.	do 14, 1872	Dobbie, Thos. Wm.	do 14, 1872
Caddy, John St. Vincent	do 14, 1872	Donnelly, Richard Holmes	do 14, 1872
Cadenhead, J. A.	May 2, 1887	Dorval, Urgel	do 14, 1872
Caldwell, Thos.	April 14, 1872	Doucet, Alfred J.	do 14, 1872
Cambie, Henry John	do 14, 1872	Doupe, Jos.	do 14, 1872
Campbell, David S.	do 14, 1872	Doupe, J. L.	Oct. 6, 1888
Carbert, Jos. Alfred	May 12, 1880	Drennan, Wm.	April 14, 1872
Carre, Henry	April 14, 1872	Drewry, Wm. Stewart	Nov. 14, 1883
Carroll, Peter	do 14, 1872	Driscoll, Alfred	April 14, 1872
Carroll, Cyrus	do 14, 1872	Driscoll, Alfred, jun.	Feb. 23, 1887
Casgrain, P. A. E.	do 14, 1872	Drummond, Thos.	June 24, 1878
Casgrain, J. P. B.	May 18, 1881	Dubé, Octave A.	April 14, 1872
Castle, Henry J.	April 14, 1872	DuBerger, Cyprien Chas.	Nov. 17, 1881
Cattanack, Angus	do 14, 1872	Duchesnay, Edmond Tachereau	do 15, 1880
Causley, John	May 20, 1884	Ducker, Wm. A.	Mar. 30, 1883
Cavana, Allan Geo.	Nov. 17, 1876	Dudderidge, Jas.	do 31, 1882
Chadwick, Fred. J.	April 14, 1872	Dufresne, Jos. Ibrahim	May 10, 1882
Chalmers, T. W.	Nov. 7, 1888	Dufresne, L. A.	Aug. 21, 1888
Chandler, Libert	April 14, 1872	Dumais, P. Horace	April 14, 1872
Chapman, Chas. F.	do 14, 1872	Dumais, Paul T. C.	Mar. 29, 1882
Cheesman, Thos.	do 14, 1872	Dupuis, Zephair C.	do 29, 1882
Chevrotière, A. H. T. C. de la	do 14, 1872	Du Tremblay, Geo. B.	Nov. 13, 1883

## LIST of Dominion Land Surveyors—Continued.

Name.	Date of Commission.	Name.	Date of Commission.
Du Tremblay, P. P. V.	April 14, 1872	Gore, Wm. Sinclair	April 14, 1872
Duval, Jos. Narcisse	do 14, 1872	Gore, Thos. Sinclair	do 19, 1879
Dyas, Thos. Waining	do 14, 1872	Gossage, Brooks Wright	do 14, 1872
Eaton, W. Case	do 14, 1872	Gosselin, Pierre	May 15, 1880
Edwards, Geo.	do 14, 1872	Gosselin, Louis	do 15, 1880
Edwards, Wm	do 14, 1872	Graddon, W. Urban	April 14, 1872
Edwards, John	do 14, 1872	Grain, Wm	do 14, 1872
Egan, Michael R.	do 14, 1872	Greene, Thos. Daniel	May 19, 1884
Ellis, Wm. Henry	do 14, 1872	Greene, N. H.	April 14, 1872
Ellis, Henry Disney	Mar. 30, 1882	Griffin, Patrick	do 14, 1872
Esten, Jas. Hutchinson	April 14, 1872	Grondin, Etienne	do 14, 1872
Evans, John Dunlop	do 14, 1872	Guerin, Thos	do 14, 1872
Fafard, F. X.	May 17, 1886	Guy, Louis	do 14, 1872
Falls, Hugh	April 14, 1872	Hall, Hammond G.	do 14, 1872
Farnan, Felix	do 14, 1872	Hall, Jas	do 14, 1872
Fawcett, Thos	Nov. 18, 1876	Hallen, Skeeker Wm	do 14, 1872
Featherston, Thos.	April 14, 1872	Hamel, A. Alfred	do 14, 1872
Fell, Zenas	do 14, 1872	Hamilton, Jas	do 14, 1872
Fessenden, Cortes	do 14, 1872	Hamilton, Robt.	do 14, 1872
Fitch, John Chas	do 14, 1872	Hamilton, Lauchlan A.	do 17, 1879
Fitton, Chas. Edward	May 12, 1880	Hamlin, Latham Blacker	do 14, 1872
Fitzgerald, Jas. Wm	April 14, 1872	Hanning, Clement Geo.	do 14, 1872
Fitzpatrick, J. D. A.	Feb. 23, 1887	Harkin, Ed. Jos.	do 14, 1872
Fleuning, Sandford	April 14, 1872	Harley, Wm	do 14, 1872
Fletcher, Edward T.	do 14, 1872	Harris, John	do 14, 1872
Fletcher, Ormond	Nov. 12, 1884	Hart, Milner	do 14, 1872
Forbes, Chas. F. H.	April 14, 1872	Harwood, Hen. F.	do 14, 1872
Forgues, Chas. E.	Nov. 12, 1884	Haskins, Williams	do 14, 1872
Forlong, W. G.	May 17, 1886	Hawkins, Wm	do 14, 1872
Forrest, A. H. D.	April 14, 1872	Hayden, R. S. L.	do 14, 1872
Foster, Fred. Lucas	do 14, 1872	Hemming, Christopher D.	May 15, 1880
Fournier, O. B.	do 14, 1872	Henderson, E. D.	April 14, 1872
Fournier, Eric Servule	do 14, 1872	Henderson, Walter	Nov. 17, 1883
Fournier, J. B. P.	do 14, 1872	Henry, William	do 14, 1872
Fowlie, Albert	do 14, 1872	Herron, Royal Wilkerson	do 14, 1872
Fox, Edward	do 14, 1872	Herron, Ernest Bolton	June 22, 1885
Francis, John	June 17, 1875	Hewson, Thomas Ringwood	Nov. 13, 1878
Francis, John J.	April 14, 1872	Hill, John	May 18, 1881
Franks, Cecil Bushe	Nov. 15, 1880	Hobson, Jos.	April 14, 1872
Fraser, Chas.	April 14, 1872	Holwell, W. J. S.	April 14, 1872
Frost, G. A.	do 14, 1872	Hood, Andrew	do 14, 1872
Gagnon, Antoine	do 14, 1872	Horse, Henry Hodge	do 14, 1872
Gagnon, Gedeon	do 14, 1872	Howard, John G.	do 14, 1872
Gaitskell, W. Ewbank	do 14, 1872	Howitt, Alfred	do 14, 1872
Gaitskell Ed. Forbes	do 14, 1872	Hubbell, Ernest Wilson	May 19, 1884
Galbraith, Wm.	do 14, 1872	Hudson, Thomas B.	April 14, 1872
Galbraith, John	Nov. 19, 1877	Hughes, John	do 14, 1872
Galbraith, Wm.	May 16, 1883	Hughes, Thomas	do 14, 1872
Gallagher, Jeremiah	May 8, 1882	Hyndman, Patrick K.	do 14, 1872
Gamache, Jos.	April 14, 1872	Irwin, Henry	Feb. 17, 1887
Gamble, K.	May 13, 1886	Irwin, James N.	April 14, 1872
Garden, Jas. Ford	May 13, 1880	James, Silas	do 14, 1872
Gardner, Peter	April 14, 1872	Jephson, Richard Jermy	May 12, 1880
Gardiner, Ed.	do 14, 1872	Johnson, Hiram	April 14, 1872
Garon, Geo.	do 14, 1872	Johnson, B. G.	do 14, 1872
Garon, Louis Jos.	May 21, 1881	Johnston, John	do 14, 1872
Gauvreau, Louis Pierre	April 14, 1872	Johnson, George Bell	do 14, 1872
Gaviller, Maurice	do 14, 1872	Johnston, William O.	Mar. 29, 1883
Genest, Arthur Turcotte	Nov. 16, 1883	Johnson, Quintin	April 14, 1872
Geoffries, D. H.	April 14, 1872	Jones, Robert	do 14, 1872
Gibbons, Jas.	Feb. 12, 1891	Jones, Francis	do 14, 1872
Gibbs, Thos. F.	April 14, 1872	Jones, E. R.	do 14, 1872
Gibson, Peter Silas	do 14, 1872	Jones, John Henry	do 14, 1872
Gibson, Geo.	do 14, 1872	Jones, Thomas Henry	Nov. 12, 1878
Gibson, Jas. A.	do 14, 1872	Jones, Charles Albert	Mar. 31, 1882
Gill, Valentine	do 14, 1872	Kains, Tom	May 10, 1880
Gilliland, Thos.	do 14, 1872	Keefer, Thomas C.	April 14, 1872
Gilmour, Robt.	do 14, 1872	Kennedy, Lachlan	do 14, 1872



LIST of Dominion Land Surveyors—*Continued.*

Name.	Date of Commission.	Name.	Date of Commission.
Kerr, Francis.....	April 14, 1872	Miles, Chas. Falconer.....	April 14, 1872
Kertland, Edward Henry.....	do 14, 1872	Miller, Robert B.....	May 11, 1880
King, Wm. Fred.....	Nov. 21, 1876	Miller, Fred. Fraser.....	do 12, 1885
Kingsford, William.....	April 14, 1872	Misner, Jacob.....	April 14, 1872
Kingston, George M.....	June 17, 1875	Mitchell, Michael.....	do 14, 1872
Kirk, Joseph.....	April 14, 1872	Moffat, James.....	do 14, 1872
Kirk, John Albert.....	May 11, 1880	Molloy, John.....	do 14, 1872
Kirkpatrick, George B.....	April 14, 1872	Montgomery.....	do 14, 1872
Klotz, Otto J.....	Nov. 19, 1877	Moore, Robert M.....	do 14, 1872
Knight, W. H.....	April 14, 1872	Moore, J. H.....	Feb. 13, 1890
Laberge, Elzear.....	Mar. 28, 1883	Morency, David Chas.....	April 19, 1879
Laird, James Stewart.....	April 14, 1872	Morin, Pierre Louis.....	do 14, 1872
Lalanne, Leon G.....	do 14, 1872	Morris, John.....	do 14, 1872
Lapenotière, Wm. H. L.....	do 14, 1872	Morris, Alfred Edmund.....	Mar. 28, 1882
Laporte, Jeremie.....	do 14, 1872	Mountain, Geo. A.....	May 13, 1882
Larue, E. F. X.....	do 14, 1872	Mullarkey, John Patrick.....	do 14, 1884
LaRue, Charles, Eugene.....	Nov. 21, 1882	Murdock, Wm.....	April 14, 1872
Latimer, F. H.....	do 13, 1885	Murphy, Francis.....	do 14, 1872
Laurie, Richard C.....	April 27, 1883	McAree, John.....	do 14, 1872
Laurier, Carolus.....	do 14, 1872	McArthur, James.....	do 14, 1872
Lavergne, E. Elzear.....	do 14, 1872	McArthur, James Jos.....	do 17, 1879
Lavolette, Godfroi.....	do 14, 1872	McCallum, Duncan.....	do 14, 1872
Lawe, Henry.....	do 14, 1872	McCallum, Jas.....	do 14, 1872
Le Ber, Charles.....	do 14, 1872	McCallum, F. C.....	do 14, 1872
Leclair, J. H.....	do 14, 1872	McClary, Wm.....	do 14, 1872
Leclerc, Charles F.....	May 10, 1882	McConnell, Wm.....	do 14, 1872
Leduc, Edward.....	April 14, 1872	McConnell, Edward.....	do 14, 1872
Lefrançois, N. V.....	do 14, 1872	McConnell, B. D.....	do 14, 1872
Lefrançois, P. O.....	do 14, 1872	McConville, P. E.....	do 14, 1872
Legendre, Jean Baptiste.....	do 14, 1872	McDermott, Michael.....	do 14, 1872
Legendre, J. B. O.....	do 14, 1872	McDonald, Wm.....	do 14, 1872
Legendre, Hilarion.....	do 14, 1872	McDonald, John.....	do 14, 1872
Legendre, Felix.....	do 14, 1872	McDonald, Alexander.....	do 14, 1872
Legendre, Edward Hospice.....	do 14, 1872	McDonald, Wm. John.....	do 14, 1872
Lemoine, Louis D.....	do 14, 1872	McDonell, John R.....	do 14, 1872
Lemoine, Chas. Errol.....	Mar. 31, 1882	McDonnell, Robt.....	April 14, 1872
Lendrum Robert Watt.....	May 15, 1880	McDonnell, Augustine.....	do 14, 1872
Leslie, Hamilton.....	April 14, 1872	McEvoy, Hen. Robertson.....	May 15, 1884
Lett, Charles Arthur.....	May 13, 1880	McFadden, Moses.....	April 14, 1872
Levesque, Pierre.....	April 14, 1872	McFarlane, John.....	do 14, 1872
Lewis, John B.....	Nov. 14, 1883	McFee, Angus.....	do 19, 1879
Lillie, Henry.....	April 14, 1872	McGee, John Jos.....	do 14, 1872
Lindsay, John.....	do 14, 1872	McGeorge, Wm. G.....	do 14, 1872
Lippe, André Guillaume.....	do 14, 1872	McGrandle, Hugh.....	May 30, 1883
Lloyd, Geo. Andrew.....	do 14, 1872	McGuin, Sam. Owen.....	April 14, 1872
Lough, Matthew.....	do 14, 1872	McIntosh, Jas.....	do 14, 1872
Lowe, N. E.....	do 14, 1872	McKay, Owen.....	Feb. 13, 1890
Lucas, Samuel B.....	do 14, 1872	McKenna, John Jos.....	April 14, 1872
Lumsden, Hugh D.....	do 14, 1872	McKenzie, John.....	Nov. 18, 1888
Lynn, Robert.....	do 14, 1872	McLaren, Peter.....	April 14, 1872
Lynn, John Goodenough.....	do 14, 1872	McLatchie, John.....	do 14, 1872
Macdougall, Allan H.....	do 14, 1872	McLean, Jas. K.....	do 1, 1882
MacLennan, Finlay Mal.....	do 12, 1883	McLennan, Christopher.....	do 14, 1872
Macmartin, Geo. Erastus.....	Nov. 15, 1880	McLennan, Rogerick.....	do 14, 1872
Macmillan, Jas. A.....	May 19, 1881	McLeod, H. Augustine F.....	do 14, 1872
MacPherson, Duncan.....	do 14, 1884	McPhillips, Geo.....	June 17, 1875
Maddock, Junius Arthur.....	Mar. 31, 1882	McPhillips, Robt. Chas.....	May 17, 1880
Magrath, Bolton.....	April 14, 1872	McVittie, Archibald H.....	Mar. 30, 1882
Magrath, Chas. Alex.....	Nov. 16, 1881	Napier, Wm. Hen. E.....	April 14, 1872
Malcolm Sherman.....	April 14, 1872	Nash, Ephraim.....	do 14, 1872
Maltais, Jean.....	May 15, 1883	Nash, Thomas Webb.....	do 14, 1872
Marshall, James.....	April 14, 1872	Neilson, John.....	do 14, 1872
Martin, James W.....	do 14, 1872	Nelson, John Chas.....	May 21, 1881
Martin, F. A.....	do 14, 1872	Newman, John.....	April 14, 1872
Mercer, William.....	do 14, 1872	Newman, R. Morris.....	do 14, 1872
Michaud, C. E.....	do 14, 1872	Niven, Alex.....	do 14, 1872
Michaud, Alexis Thos.....	May 11, 1880	Northcote, Henry.....	do 14, 1872
Michaud, Jos. Louis.....	Mar. 29, 1882	Norton, Fred. Wm.....	May 14, 1884



LIST of Dominion Land Surveyors—*Continued.*

Name.	Date of Commission.	Name.	Date of Commission.
O'Beirne, Patrick	April 14, 1872	Ross, J. E.	Feb. 12, 1891
O'Brien, Sam.	do 14, 1872	Ross, Geo.	Nov. 21, 1882
O'Donnell, Hugh	Mar. 29, 1883	Roy, Geo. Peter	do 17, 1881
O'Dwyer, W. W.	April 14, 1872	Rubidge, Fred. P.	April 14, 1872
O'Dwyer, John Seabury	Nov. 16, 1882	Rubidge, T. S.	do 14, 1872
O'Flynn, Edward	April 14, 1872	Russell, Lindsay A.	do 14, 1872
Ogilvie, Wm.	do 14, 1872	Russell, Alex. Lord	do 14, 1872
Ogilvie, John Henry	May 11, 1880	Ryley, Geo. Urquhart	May 15, 1880
O'Hanley, John L. Power.	April 14, 1872	Saint Cyr, A.	Feb. 17, 1887
O'Hanley, John Mitchell	Nov. 15, 1878	Saint Cyr, J. B.	do 17, 1887
O'Keefe, David C.	April 14, 1872	Sankey, Villiers	May 15, 1880
O'Mara, John	do 14, 1872	Saunders, Bryce J.	Nov. 16, 1884
O'Neil, John F.	do 14, 1872	Savage, Jos.	April 14, 1872
Ord, Lewis Redman	do 1, 1882	Scane, Thos.	do 14, 1872
Ostell, John	do 14, 1872	Seager, Edmund	do 14, 1872
Painchaud, Etienne A.	do 14, 1872	Selby, Hen. Walter	Nov. 15, 1882
Parent, Henri	do 14, 1872	Sewell, Alex.	April 14, 1872
Pariseau, Louis Stanislas	May 20, 1881	Sewell, Hen. De Quincy	May 16, 1885
Paterson, Jas. A.	April 1, 1882	Shaw, Claudius	April 14, 1872
Patrick, Allan Poyntz	Nov. 19, 1877	Shaw, Chas. A.	May 10, 1880
Patrick, Lorraine	May 18, 1881	Sheppard, H. C.	April 14, 1872
Patten, Thaddeus Jas	Mar. 29, 1883	Sheppard, Chas. G.	May 11, 1880
Pearce, Wm	May 10, 1880	Shortt, Laurence H.	April 14, 1872
Pelletier, Sam.	April 14, 1872	Shurtliff, Lemuel	do 14, 1872
Pelletier, Chas. C.	June 22, 1885	Simpson, Geo. Albert	do 14, 1872
Perceval, Wm.	April 14, 1872	Sing, Josiah Gershom	do 19, 1879
Perrault, H. Maurice	do 14, 1872	Sirois, Jos. E.	May 11, 1882
Perry, Aylsworth B.	do 14, 1872	Slattery, Jas.	April 14, 1872
Perry, Nathan Fellows	do 14, 1872	Small, Wolstan N.	May 11, 1880
Peters, Sam.	do 14, 1872	Smiley, Wm.	April 14, 1872
Peterson, Peter A.	April 14, 1872	Smith, Wm.	do 14, 1872
Peterson, Jos. S.	do 14, 1872	Smith, Henry	do 14, 1872
Pinhey, C. H.	Feb. 20, 1889	Smith, Christopher	do 14, 1872
Ponton, Archibald W.	May 18, 1881	Smith, Wm.	do 14, 1872
Poudrier, Alcide Lemay	do 21, 1881	Smith, John	do 14, 1872
Preston, Reuben	April 14, 1872	Speight, Thos.	Nov. 16, 1882
Prosser, Thos	do 14, 1872	Sproatt, Chas.	April 14, 1872
Proudfoot, Hume Blake	Mar. 28, 1882	Sproule, Wm. J.	Nov. 15, 1882
Proulx, Jean Pierre	April 14, 1872	Spry, Wm.	April 14, 1872
Proulx, P. A.	do 14, 1872	Staunton, F. H. Lynch	do 14, 1872
Purvis, Frank	Nov. 16, 1882	Steward, John	May 11, 1880
Quinn, Thos. C.	April 14, 1872	Stewart, Geo. Alex.	April 14, 1872
Rainboth, Geo. C.	do 14, 1872	Stewart, Elihu	do 14, 1872
Rainboth, Edwd. Jos.	May 19, 1881	Stewart, Louis Beaufort	Nov. 22, 1882
Rankin, Chas	April 14, 1872	Stewart, John D.	do 22, 1882
Rauscher, Rudolf	do 14, 1872	St. Pierre, J. E.	April 14, 1872
Reid, John	do 14, 1872	Strange, Henry	do 14, 1872
Reid, Jos. Hales	do 14, 1872	Strathern, John	do 20, 1887
Reid, John Lestock	do 14, 1872	Sullivan, John	do 14, 1872
Reifenstein, Jas. H.	May 11, 1880	Sullivan, Henry	do 14, 1872
Reilly, Wm. Robinson	Nov. 17, 1881	Swan, John	May 19, 1884
Richard, Jean Baptiste	April 14, 1872	Symmes, H. C.	April 14, 1872
Richard, Jos. François	May 13, 1882	Symmes, C. T.	Aug. 16, 1887
Richey, Josias	April 14, 1872	Taché, Eugène E.	April 14, 1872
Rielle, Jos	do 14, 1872	Talbot, Albert Chas.	May 13, 1880
Ritchie, J. F.	Jan. 7, 1889	Talbot, Pierre Cléophas	do 13, 1880
Rixtort, G. P.	April 14, 1872	Temple, Edmund Bonner	April 14, 1872
Roberts, Vaughan Maurice	May 17, 1886	Têtu, Francis A.	do 14, 1872
Robertson, Richd. G. M.	April 14, 1872	Têtu, Romuald	do 14, 1872
Robertson, Henry	do 14, 1872	Thompson, Edward Wm.	do 14, 1872
Robinson, Wm	do 14, 1872	Thompson, Wm. T.	Nov. 19, 1877
Robinson, Orpheus	do 14, 1872	Thomson, Augustus C.	April 14, 1872
Robinson, Geo	do 14, 1872	Tinling, —	do 14, 1872
Rogers, Richd. Birdsall	May 13, 1880	Tomkins, Wm. Graeme	do 14, 1872
Rombough, W. R.	April 14, 1872	Towle, C. E.	do 14, 1872
Rombough, Marshall B.	do 14, 1872	Tracey, Wm.	do 14, 1872
Roney, Jas.	do 14, 1872	Tracey, Thomas Henry	do 14, 1872
Ross, R. J.	do 14, 1872	Traynor, Isaac	Nov. 15, 1880

LIST of Dominion Land Surveyors—*Concluded.*

Name.	Date of Commission.	Name.	Date of Commission.
Tremblay, Thomas .....	Aug. 19, 1890	Warren, James .....	April 14, 1872
Tremblay, Jules .....	April 14, 1872	Weatherald, Thomas .....	do 14, 1872
Tremblay, Ovide .....	do 14, 1872	Webb, Edward .....	do 14, 1872
Tremblay, A. J. ....	Feb. 18, 1890	Webster, Daniel .....	do 14, 1872
Trewe, Charles Newland .....	April 14, 1872	Weekes, George .....	do 14, 1872
Tuffe, — .....	do 14, 1872	Wells, Oliver .....	do 14, 1872
Tuily, John .....	do 14, 1872	Wells, Alphonso .....	do 14, 1872
Turnbull, Thos. ....	Mar. 29, 1882	Wells, Alex. ....	do 14, 1872
Tyrrell, J. W. ....	Feb. 16, 1887	Wells, Daniel W. ....	do 14, 1872
Unwin, Chas. ....	April 14, 1872	West, James .....	do 14, 1872
Ussher, Edgeworth R. ....	do 14, 1872	Wheeler, Arthur Oliver .....	Nov. 21, 1882
VanNostrand, Arthur Jabez .....	Nov. 16, 1882	Wheelock, C. J. ....	April 14, 1872
Vansittart, John P. ....	April 14, 1872	Whitcher, A. H. ....	do 14, 1872
Varnier, J. C. ....	do 14, 1872	White, George M. ....	Feb. 21, 1888
Vaughan, A. H. ....	do 14, 1872	White, Joseph .....	April 14, 1872
Vaughan, Josephus W. ....	June 11, 1878	Wilkie, E. T. ....	Aug. 19, 1890
Verrault, Philippe .....	April 14, 1872	Wilkins, Fred. W. ....	May 18, 1881
Verrault, Chas. A. ....	do 14, 1872	Wilkinson, Alex. ....	April 14, 1872
Vicars, John R. O. ....	May 17, 1886	Williams, David .....	do 14, 1872
Vidal, Alex. ....	April 14, 1872	Wilson, Robert Alex. ....	June 11, 1878
Vincent, Ferdinand .....	Nov. 17, 1881	Wilson, Alfred .....	April 14, 1872
Vondenvelden, Wm .....	April 14, 1872	Wilson, Hugh. ....	do 14, 1872
Wadsworth, Vernon B. ....	do 14, 1872	Winter, Henry .....	do 14, 1872
Wagner, Wm. ....	do 14, 1872	Wood, Henry O. ....	do 14, 1872
Walker, Alfred Paverley .....	Mar. 28, 1882	Woods, J. E. ....	Nov. 14, 1885
Wallace, Charles Hugh .....	Feb. 13, 1890	Wurtele, Arthur S. E. ....	April 14, 1872
Walsh, Thos. W. ....	April 14, 1872	Yarnold, William Edward .....	do 14, 1872
Ware, William .....	do 14, 1872	Young, Robert Evans. ....	Nov. 22, 1882

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SECTION II.

THEORY OF THE SYSTEM OF SURVEY

OF

DOMINION LANDS

WITH

GEODETIC TABLES AND NOTES ON THEIR USE

BY

W. F. KING, B.A., D.T.S.,

CHIEF ASTRONOMER OF THE DEPARTMENT OF THE INTERIOR.

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## SECTION II.

### THEORY OF THE SYSTEM OF SURVEY OF DOMINION LANDS.

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#### CHAPTER I.—GENERAL DESCRIPTION OF THE SYSTEM.

##### *Size of the Township.*

In the Dominion Lands surveys, the township contains thirty-six sections, each approximately one mile square, together with certain allowances for roads, and measures on each side six miles plus the road allowances.

##### *Governing Lines—Initial Meridians and Base Lines.*

The lines upon which the surveys are based are certain Principal or Initial Meridians which run from the International Boundary, or 49th parallel of latitude, northward indefinitely.

Along these meridians are placed the monuments marking the section and township corners in regular order northward from the boundary, from which also the townships are numbered.

There are also certain lines, called base lines, which run westward or eastward from the Initial Meridians, starting from them at distances apart of four townships; so that, the International Boundary Line being the first base line, the second base line lies between townships 4 and 5, the third between townships 8 and 9, and so on.

These base lines are surveyed as chords of the latitude circles which pass through their intersections with the Initial Meridian. The chords are one township (six miles together with the roads) in length, and hence an angle occurs on the base line at each township corner. Along the base lines, as on the Initial Meridians, the section and township corner monuments are placed at their regular distances.

##### *Meridian Boundaries.*

The eastern and western boundaries of townships are true meridians which start from the base line and are continued on each side thereof for two townships, when they encounter the meridians drawn in the same way from the next base line, but do not meet them exactly, since, on account of the convergence and divergence of meridians, the extremity of the line drawn south from the northerly base line passes to the west of that drawn north from the southerly base line.

##### *Correction Lines.*

Hence a "jog" occurs on that township line which lies midway between the base lines. This township line is called a correction line, for on it not only the jogs due to the system itself, but also all errors in survey, whether in the chainage or in the azimuth of the lines, are allowed to fall and are so prevented from accumulating to such an extent as to deform other townships except those on whose outlines they occur.

##### *Northern and Southern Boundaries of Townships.*

The northern and southern boundaries of townships are straight lines (or great circles of the sphere) joining the corresponding points on the east and west meridian boundaries.

##### *Form and Dimensions of Townships.*

Townships are therefore quadrilaterals, having their east and west sides true meridians, and in length equal to six "sections" (that is six miles together with the roads), and having their north and south sides inclined at equal angles to these meri-

dians, while the northern boundary is somewhat shorter than the southern boundary, these lengths varying from 480 chains plus the roads on the base line to about 180 links more on the next correction line south, and about 180 links less on the next one to the north. The angles of the township differ from  $90^\circ$  by about 4' only.

These are the theoretical dimensions and form of the township. Of course, the lengths of the lines and the magnitude of the angles may differ from theory from the effect of errors in surveying, but the closings on correction lines cut out these errors and prevent them from so accumulating as to materially deform the townships.

Townships are designated by their numbers counting north from the 49th parallel with the number of the "Range" in which they lie, these ranges being counted east or west from the Initial Meridian.

#### *Different Systems of Survey.*

Since the surveys in Manitoba and the Western Territories of Canada were initiated in 1870, changes have been made from time to time in the system, as regards the number and width of the road allowances, as well as in the manner of surveying townships and sections. There have thus been three systems of survey, generally called the first, second and third systems from their order in time.

#### *Distinctions between the Systems.*

In the first and second systems the roads are one and a half chains wide, and are placed between all sections on both north and south, and east and west lines.

In the third system, which covers the entire area of Manitoba and the Western Territories, except the comparatively small area previously surveyed under the first and second systems, the roads are only one chain wide, and are placed along each alternate east and west section line, and along each north and south line.

So the townships of the first and second systems are 489 chains each way, while those of the third system are 483 chains from north to south, and 486 from east to west (these widths being, as above explained, subject to increase or decrease from divergence or convergence of meridians).

The second system differs from the first in the manner of subdividing the township into sections. In the first system, the interior lines forming the eastern boundaries of sections are drawn parallel to the eastern boundary of the township, so that all the deficiency or surplus caused by convergence of meridians, is left in the tier of quarter sections adjoining the western boundary of the township.

In the second system the eastern boundaries of sections are true meridians.

In the third system also the interior lines are true meridians.

In all three systems the northern and southern boundaries of sections are straight lines connecting points on the eastern or western boundaries, which have been established by chainage.

In all the systems the sections in a township are designated by numbers from 1 to 36, beginning with 1 at the south-east corner of the township and counting west and east alternately across the township to 36 in the north-east corner.

#### *Position of Posts with regard to the Road Allowances.*

The posts for section corners are placed on the south and west sides of the road allowance, each section post governing the corner of four sections, except on correction lines, where posts stand on the north side of the road to mark the boundaries of sections on the north side of the road. Also on the lines between different systems of survey, posts are placed on both sides of the road allowance.

But, in general, the post marks the south or west side of a road allowance, or in other words, stands at the north-east corner of a section. The quantities given in the appended tables always refer, unless otherwise stated, to the northern and eastern boundaries of sections or townships.



*Fourth System of Survey.*

There is a fourth system of survey, which is in force in the Canadian Pacific Railway belt in British Columbia. This system is exactly similar to the third system, as to the manner of surveying townships, and the townships are of the same dimensions; but the roads are thrown into the sections, so that every section measures 80·50 chains from north to south, and 81 from east to west, subject to deficiency or surplus from converging or diverging meridians.

Thus in the fourth system the quarter section and section posts on a base line, beginning at the easterly corner of a township and going west, stand at distances 40·50, 40·50, 40·50, 40·50, &c., while in the third system they stand at 40, 41, 40, 41, &c., the only difference being in the position of the quarter section posts. On the meridian outline of a township, in the fourth system, beginning at the southerly corner and going north, the posts stand at 40·25, 40·25, 40·25, 40·25, &c., while in the third system they stand at 41, 40, 40, 40, &c. Here there is a difference in the position of the quarter section corners, and each alternate section corner. The greatest difference in the position of any post is 75 links. The tables made for the third system, therefore, answer for the fourth also, except the tables of latitudes and longitudes, which will require correction in cases where the highest degree of accuracy is desired.

*Fifth System of Survey.*

This system is applied to the survey of certain townships in the lower valley of the Fraser River in British Columbia. There are no roads. Each section is 80 chains square, and the townships, of 36 sections each, are based upon the 49th parallel and an Initial Meridian called the Coast Meridian.

*Advantages of the Dominion Lands System of Survey.*

Some of the advantages of the Dominion Lands system of survey (especially the third system) are these:—

The boundaries of townships are straight lines (that is, great circles or surveyors' transit lines), and the interior lines also are straight for the greatest possible distance. The straightness of lines greatly facilitates the picking up of a line and its re-establishment when some of the posts have been removed or destroyed.

Directions of analogous lines in two townships or two sections are the same, or nearly so. This simplifies the original survey and facilitates resurvey. Lines are also referred to the astronomic meridian, thereby avoiding the confusions and errors arising in many of the older settled parts of the Dominion from the use of the variable magnetic meridian.

The parcels of land are, as nearly as possible, equal in area and similar in form, and permit of a simple system of numbering, by which descriptions are facilitated. The parcels of land are also square, or nearly so—the shape most suitable, on the whole, for farms.

The surveys of different townships and different parts of the country are independent, or nearly so. Errors are cut out, and not carried forward throughout the system, and the survey of an isolated tract may be made without waiting for the complete survey of all the country intervening between it and the initial point of the system, and without fear of a gore or overlap, when the intermediate district is surveyed.

*Tables.*

Another result from the similarity of townships to each other is the simplicity of the tables giving the azimuths and lengths of lines. Such tables are indispensable in surveys to be made on a very large scale and by a great number of surveyors.

Tables of azimuths and lengths of lines were calculated by the writer, and published as an appendix in the Annual Report of the Minister of Interior for 1879. These tables were calculated for the first and second systems of survey.

In 1881 the change in the system of survey necessitated a recalculation, so that the tables might serve for the third system of survey. The new tables were printed in the Manual of Surveys issued by direction of the Minister of Interior in 1881 (a second edition in 1883).

Since the tracts of country set aside for the first and second systems have not yet been completely surveyed, it has been deemed advisable to reprint here the tables for the first and second systems along with those of the third system for the sake of ready reference. The tables in the appended collection have been carefully checked. Table I, the general geodetic table, not referring to any particular system of survey, has been carefully recomputed, and has been extended so as to cover the whole of Canada from its most southerly point, Point Pelee, in Lake Erie, in latitude  $42^{\circ}$ , to latitude  $70^{\circ}$ .

### *Limits of the Different Systems of Survey.*

The operation of the first system of survey is restricted to the area bounded as follows, viz.:—

To the south by the International Boundary Line; to the west by the Second Meridian as far as the eighth correction line; by said correction line as far as the meridian between Ranges 28 and 29 west of the Principal Meridian; by said meridian, between Ranges 28 and 29, as far as the seventh correction line; by said correction line as far as the meridian between Ranges 7 and 8, east of Principal Meridian; by said meridian, between Ranges 7 and 8, as far as the north boundary of Township 19; by the north boundary of Township 19, in Ranges 8, 9 and 10, east of the Principal Meridian as far as the meridian between Ranges 10 and 11, east of the Principal Meridian; by said meridian, between Ranges 10 and 11, as far as the third correction line; by said correction line as far as the eastern boundary of the Province of Manitoba; by said eastern boundary as far as the International Boundary Line.

Also Townships 44, R. 21; Tp. 45, R. 21, 22, 27, 28; Tps. 46 and 47, R. 25, 26, 27 and 28; Tp. 47, R. 24, and Tp. 48, R. 24, 25, 26 and 27, west of the Second Meridian.

Townships 42 to 47 inclusive, R. 1; and Tps. 43 and 44, R. 2 and 3, west of the Third Meridian.

The second system of survey is similar in all respects to the first system, except in regard to the deficiency or surplus from converging or diverging meridians which is distributed equally between all quarter sections as in the actual system.

The operation of the second system of survey is restricted to Tps. 1 and 2, R. 1 to 8 inclusive; Tps. 19 to 30, R. 1 to 12 inclusive; and Tps. 27 to 30, R. 13 to 16 inclusive; the above ranges being all west of the Second Meridian.

The fourth system includes the belt twenty miles on each side of the Canadian Pacific Railway, west of the summit of the Rocky Mountains.

The fifth system, as already stated, applies to a few townships only in southwestern British Columbia.

The third system is applied to all Dominion lands not included in the first, second, fourth and fifth systems.

## CHAPTER II.

### CONSTRUCTION AND USE OF THE TABLES.

TABLE I.

*Length of Arcs of Meridians, Parallel, &c., in Different Latitudes.*

According to Col. A. R. Clarke, R.E., in his "Comparison of Standards of Length" (1866), the spheroid of revolution most nearly approaching the form of the earth has for its major or equatorial semi-axis 20926062 feet, and for its minor or polar semi-axis 20855121 feet.



Representing the major and minor axis by  $a$  and  $b$  respectively, we have for the compression,  $C = \frac{a-b}{a} = \frac{1}{294.98}$ , and the eccentricity  $e$  is given by the formula

$$e^2 = \frac{a^2 - b^2}{a^2} = \frac{1}{148} \text{ nearly.}$$

The unit of measure in the Dominion Lands surveys is the Gunter's, or sixty-six feet chain. The equatorial semi-axis in chains is  $317061.545 +$

Representing by  $\phi$  the geographical latitude of a place, or the angle which its vertical line makes with the plane of the equator, we have for the radius of curvature of the meridian

$$R = \frac{a(1-e^2)}{(1-e^2 \sin^2 \phi)^{\frac{3}{2}}},$$

for the length of the normal to the meridian terminated by the minor axis

$$N = \frac{a}{(1-e^2 \sin^2 \phi)^{\frac{1}{2}}},$$

and for the radius of the parallel of latitude  $\phi$

$$P = N \cos \phi.$$

The length in chains of one second of latitude is equal to  $R \sin 1''$ ; one second of the great circle perpendicular to the meridian is equal to  $N \sin 1''$ ; and one second of longitude is equal to  $P \sin 1''$ . The logarithms of these quantities are placed in the second, third and fourth columns of Table I. They have been calculated by means of the logarithmic expansions of  $R$  and  $N$ .

Thus putting  $n$  for  $\frac{a-b}{a+b}$  we have

$$\begin{aligned} \log (R \sin 1'') &= \log a + \log \sin 1'' - M \left( n + \frac{3n^2}{2} \right) \\ &\quad - 3M \left( n \cos 2\phi - \frac{n^2}{2} \cos 4\phi \right) + \&c. \end{aligned}$$

where  $M$  is the modulus of the common system of logarithms, and powers of  $n$  higher than the second are neglected as being insensible in the eighth decimal place.

Substituting the value of  $a$  in chains, as given above, and taking

$$n = \frac{a-b}{a+b} = \frac{1}{588.96}, \text{ we get}$$

$$\log (R \sin 1'') = 0.18597916 - 0.00221218 \cos 2\phi + 0.00000188 \cos 4\phi.$$

In calculating the two last terms by logarithms five places are sufficient.

For  $N \sin 1''$  we have

$$\begin{aligned} \log (N \sin 1'') &= \frac{1}{3} \log (R \sin 1'') + \frac{2}{3} \{ \log a + \log \sin 1'' + 2 Mn \} \\ &= \frac{1}{3} \log (R \sin 1'') + 0.12546215. \end{aligned}$$

For  $P \sin 1''$ ;  $\log P \sin 1'' = \log (N \sin 1'') + \log \cos \phi$ .

The calculation has been made to eight places of decimals to ensure accuracy in the seventh place. In tabulating, the eighth figure has been dropped.

The calculation of the logarithms of  $R \sin 1''$  and  $N \sin 1''$  has also been made directly from the formulæ for  $R$  and  $N$ , by the use of a subsidiary angle.

Thus, finding an angle  $\psi$  such that  $\sin \psi = e \sin \phi$  we have

$$R \sin 1'' = a(1-e^2) \sec^3 \psi \sin 1''$$

$$N \sin 1'' = a \sec \psi \sin 1''.$$

Seven figure logarithms were used, and consequently the results could not be depended upon to the seventh figure, but they have been serviceable as a check upon the series computation.

$\log N \sin 1''$ ,  $\log P \sin 1''$  and  $\log R \sin 1''$  are given in the table for every  $10'$  of latitude from  $42^\circ$  to  $70^\circ$ . Their values for intermediate latitudes can be obtained by simple interpolation. Where, however,  $\log P \sin 1''$  is required with accuracy for an intermediate latitude, it is better first to obtain  $\log N \sin 1''$  for that latitude by interpolation from the table and then to add  $\log \cos \phi$ .



Under the heading "Chains in 1''" are given the natural numbers corresponding to the logarithms of  $R \sin 1''$  and  $P \sin 1''$ . These natural numbers are useful in reducing small differences of latitude and longitude to chains by simple multiplication, being preferable in many cases to the logarithms.

The converse operation of reducing short distances north and south or east and west to seconds of latitude or longitude may be performed by multiplying by the quantities in the two columns headed "seconds in one chain." These columns contain the reciprocals of the quantities in the columns "chains in one second."

In the last two columns of the table are given the lengths of one degree of latitude and longitude in English miles.

*Radius of Curvature of a Section of the Spheroid inclined at any angle to a Meridian.*

In some operations it is necessary to find the radius of curvature of the trace on the earth's surface of a "straight" or "transit" line making a given angle with the meridian.

Representing this radius of curvature by  $S$ , and  $\theta$  being the angle with the meridian, we have the formula

$$\frac{1}{S} = \frac{\cos^2 \theta}{R} + \frac{\sin^2 \theta}{N}$$

and introducing an auxiliary angle  $X$  determined by the formula

$$\tan X = \sqrt{\frac{R \sin 1''}{N \sin 1''}} \tan \theta, \text{ we have}$$

$$S \sin 1'' = N \sin 1'' \frac{\sin^2 X}{\sin^2 \theta}$$

a formula adapted for ready calculation by means of logarithms.

*Radius of Spherical Curvature.*

The mean of the values of  $S$  when  $\theta$  is given all possible values is  $\sqrt{NR}$ . This is the radius of curvature of the surface or the radius of the sphere to the surface at a given point. Its logarithm is readily found from Table I, being the arithmetical mean of the logarithms of  $N$  and  $R$ .

TABLE II.

*Corrections to Table I for Change in Elements of Figure of Earth.*

In Table I the data used are Clarke's 1866 values, viz.:—

$$a = 20926062 \text{ feet}$$

$$n = \frac{1}{588.96}$$

and all the following tables are based on Table I, and therefore on these values. Clarke's later values (Geodesy, 1888) are,

$$a = 20926202 \text{ feet.}$$

$$n = \frac{1}{585.93}$$

If, for any purpose, it is desired to use these values, Table I can be corrected by means of Table II, which has been computed thus:

Differentiating the formulæ,

$$\log R \sin 1'' = \log a + \log \sin 1'' - M(n + \frac{3}{2}n^2) - 3Mn \cos 2\phi + \frac{3}{2}Mn^2 \cos 4\phi$$

$$\log N \sin 1'' = \log a + \log \sin 1'' + M(n - \frac{n^2}{2}) - Mn \cos 2\phi + \frac{1}{2}Mn^2 \cos 4\phi$$

and putting  $\frac{1}{n} = p$ , we have

$$d(\log R \sin 1'') = M \frac{da}{a} + Mn^2 dp + 3Mn^2 \cos 2\phi dp$$

$$d(\log N \sin 1'') = M \frac{da}{a} - Mn^2 dp + Mn^2 \cos 2\phi dp$$

$M$  being the modulus of the common system of logarithms. Terms involving the cubes and higher powers of  $n$  are insensible and may be neglected.

To change Clarke's earlier to his later values, we have

$$da = +140 \text{ (feet)}$$

$$dp = -3.03$$

$$a = 20926062 \text{ (feet)}$$

$$n = \frac{1}{588.96}$$

$$\text{and } M = 0.43429448$$

$$\text{whence } d \log (R \sin 1'') = -0.0000089 - 0.0001138 \cos 2\phi$$

$$d \log (N \sin 1'') = +0.00000670 - 0.0000379 \cos 2\phi$$

These quantities are tabulated in Table II, with the proper signs of application to  $\log R \sin 1''$  and  $\log N \sin 1''$  in Table I.

TABLE III.

*Latitudes of Base and Correction Lines and Lengths of Arcs of Meridian, Parallel, &c., for First and Second Systems of Survey.*

This table is constructed for the first and second systems of survey only. It accordingly stops at the 13th Base, Township 48, north of which there are no surveys under these systems.

Each township measuring 489 chains each way, the 1st correction line is 978 chains north of the 49th parallel.

The latitude of the 1st correction line is therefore  $49^\circ + \frac{978}{R \sin 1''}$ .

Here  $R \sin 1''$  must be taken from Table I for the middle latitude between the 1st base and the 1st correction line. For accuracy it is therefore necessary to compute an approximate difference of latitude, using an approximate value of  $R \sin 1''$ . For instance  $R \sin 1''$  may be taken from the table for latitude  $49^\circ$ .

The approximate difference of latitude being thus determined, the middle latitude is found from it (this being a sufficiently close approximation), and the final  $R \sin 1''$  is taken from Table I for that latitude. Then dividing 978 by this we have a very close approximation to the difference of latitude between the base and the correction line.

From the latitude thus obtained of the 1st correction line, that of the 2nd base line is found by a similar process, and so on in succession as far as the table extends.

The table is checked by applying the same process to a longer distance than 978 chains. For example the latitude of the 6th base can be directly determined from that of the first by using 9,780 chains instead of 978. When long distances are thus taken, a second approximation to the middle latitude may become necessary.

The columns  $\log N \sin 1''$  and  $\log R \sin 1''$  are taken from Table I by interpolation, and  $\log P \sin 1''$  is found by adding  $\log \cos \phi$  to  $\log N \sin 1''$ .

The width of a township along a base line is 489 chains. The longitude corresponding to this length measured along the parallel of latitude is given in the column headed "Longitude covered by 489 chains westing," not only for the base lines but also for the correction lines.

The longitude for 489 chains, along a base line, is the longitude covered by one range of townships. Along a correction line it does not correspond to the longitude covered by a range, since the width of a township along a correction line is greater or less than 489 chains according as the township north or south of the correction line is considered. The tabulated quantity however for correction lines can be used to calculate the narrowing or widening of sections at the correction lines.

The township width 489 chains is measured along the base line which has such azimuth that its terminal point falls in the same latitude as its initial point.

Thus every township corner along a base line has the same latitude, and the base line is a succession of chords of the latitude circle.

The difference of longitude between one township corner and the next is given by the formula

$$d\lambda = \frac{486}{P \sin 1''}$$

It is assumed here that the chord of the arc of the latitude circle is equal to the arc. That the difference between the chord and the arc is inappreciable may be shown thus:

By spherical trigonometry

$$\sin \frac{\text{chord}}{2N} = \sin \frac{d\lambda}{2} \cos \phi$$

$$\begin{aligned} \text{whence chord} &\equiv N \cos \phi d\lambda - N \cos \phi \sin^2 \phi \frac{d\lambda^3}{24} \\ &= \text{arc} - \text{arc} \times \frac{d\lambda^2}{24} \sin^2 \phi \end{aligned}$$

So that the difference between the chord and the arc is equal to

$$\text{arc} \times \frac{d\lambda^2}{24} \sin^2 \phi$$

$d\lambda$  being in a circular measure.

For a chord of 489 chains this amounts to less than one-hundredth of a link.

The chord always lies north of the arc. The distance between them is greatest at their middle points, amounting there to about 10 links. Hence, at the International boundary line, which is the first base line, since the actual territorial boundary is the curve, and the base line a series of chords, the road allowance which lies along the north side of this base is increased in width by 10 links at the middle of the chords.

The non-coincidence of the chord and arc also has the effect of increasing and decreasing the widths of roads on correction lines. This will be referred to again.

In the first column of Table III are given, for convenience, the numbers of the townships corresponding to the several base and correction lines. Thus the sixth base is the northern boundary of Township 20, and so on.

TABLE IV.

*Latitudes of Base and Correction Lines, &c., for 3rd and 4th Systems of Survey.*

This is exactly similar to Table III, except that it is made for the third system of survey, where the widths of townships are 486 instead of 489 chains, and their depths, in a north and south direction, 483 instead of 489 chains.

This table also applies, without change, to the fourth system (British Columbia).

In this table, as well as in Table III, the latitudes given are those of the line of posts on the south side of the road allowance. To get the latitude of the posts north



of the road on correction lines, the latitude of the correction line, as given in the table, must be corrected by adding the equivalent in latitude of the width of the road, *i.e.*, one chain and a-half for the first and second systems (Table III), and one chain for the third system (Table IV).

TABLE V.

*Chord Azimuths, &c., for Base Lines, First and Second Systems of Survey.*

The extremities of the township chord, as above stated, are in the same latitude. Hence the chord is equally inclined to the meridians passing through its terminal points, and its azimuth, east or west of north, is equal to the complement of half the change in azimuth, that is, of half the "convergence of meridians."

Let  $dA$  represent the change in azimuth or convergence of meridians,  $d\lambda$  the difference of longitude, and  $\phi$  the latitude.

Then, by spherical trigonometry,

$$\tan \frac{1}{2} dA = \tan \frac{1}{2} d\lambda \sin \phi,$$

whence, by expansion of the tangents in terms of the arcs,

$$dA = d\lambda \sin \phi + \frac{d\lambda^3}{12} \sin \phi \cos^2 \phi$$

or, if  $dA$  and  $d\lambda$  be expressed in seconds,

$$dA = d\lambda \sin \phi + \frac{d\lambda^3}{12} \sin \phi \cos^2 \phi \sin^2 1''.$$

The second term is inappreciable, amounting in latitude  $51^\circ$  to less than one ten-thousandth of a second.

$$\therefore dA = d\lambda \sin \phi.$$

The convergence or "deflection" ( $dA$ ), given in Table V, is thus calculated from the difference of longitude ( $d\lambda$ ) in Table III.

The "chord azimuth" is the complement of half the deflection.

The chord azimuth and the deflection are given in the table in degrees, minutes and seconds, as well as in decimals of a degree, for sexagesimally and decimally divided instruments respectively.

In the survey of a base line, the surveyor, when he arrives at a township corner, deflects his line to the north through an angle equal to the "deflection," and thus establishes in azimuth the chord across the next range of townships.

This deflection angle may be turned with the instrument, but more readily by the use of the "deflection offsets" in the table. The tabulated offset is the linear distance in inches between one of the chords and the prolongation of the other, at one chain from the township corner.

Their distance apart at any point is found by multiplying the tabulated offset by the distance, expressed in chains, of the point from the township corner.

For example, if the instrument is standing on the prolongation of the first chord at 5 chains past the corner, and the back picket be 15 chains on the other side of, that is, behind the corner, then the instrument must be moved north five times, and the back picket south fifteen times, the "deflection offset for one chain." The line of the instrument and picket is now in the correct bearing for the prolongation of the base line.

The angle is thus turned as accurately as a straight line can be produced with the instrument, and much more accurately than the angle can be measured with the graduated arc, while the setting of the instrument at the corner (which may be in low ground, unsuitable for accurate line production) is rendered unnecessary.

"Longitude covered by one range" in the seventh column is merely the longitude in the seventh column of Table III, reduced to time by dividing by 15. This gives the number of seconds which a watch will gain or lose on local time in being carried across a range. The gain or loss in travelling over any other distance along is proportional to the distance. The column is added for astronomical purposes, especially the determination of azimuth by observation of Polaris at any hour angle.

This Table V applies to the first and second systems of survey.

TABLE VI.

*Chord Azimuths, &c., for Base Lines, 3rd and 4th Systems of Survey.*

This table is exactly similar to Table V, but is made for the third system of survey.

The calculation is made by the same formulæ, changing only the width of the range, which is 486, instead of 489 chains, and using the latitudes of the base lines from Table IV, instead of those from Table III.

$$d\lambda = \frac{486}{P \sin 1''} \quad dA = d\lambda \sin \phi.$$

This table also applies to the fourth system.

TABLE VII.

*Chord Azimuths, Jogs, &c., for Correction Lines, 1st and 2nd Systems of Survey.*

This table gives quantities for correction lines similar to those given in Table III for base lines. This table applies to the first and second systems of survey.

The correction lines are posted on both sides of the road. The chord azimuths and deflections are given for the south side of the road, which is that side for which the latitudes of correction lines are given in Table III.

The calculation of the chord azimuth for correction lines is somewhat different from that for base lines.

For the base lines we have

$$d\lambda = \frac{489}{P \sin 1''}$$

$$\text{deflection} = d\lambda \sin \phi.$$

For the correction lines, one range is not 489 chains, but the distance between meridians which include 489 chains on the nearest base line.

Hence in the formulæ—

$$d\lambda = \frac{489}{P \sin 1''}$$

and  $\text{deflection} = d\lambda \sin \phi = \frac{489}{P \sin 1''} \sin \phi$ , we must take  $P \sin 1''$  for the next base

line south of the correction line, if the difference of longitude and the deflection for the south side of the correction line road are required; while for the north side of that road we must take  $P \sin 1''$  for the next base line north.  $\phi$ , of course, is the latitude of the correction line itself.

The length of one range on the correction line is  $d\lambda \times P \sin 1''$

If, then,  $P_1$  and  $P_2$  represent the radius of parallel for the base lines next north and south, respectively,  $P$  that for the correction line itself

$$d\lambda_1 = \frac{489}{P_1 \sin 1''}$$

$$d\lambda_2 = \frac{489}{P_2 \sin 1''}$$

and we have for the length of one range on the correction line

$$\text{North side} = \frac{489}{P_1 \sin 1''} \times P \sin 1''$$

$$\text{South side} = \frac{489}{P_2 \sin 1''} \times P \sin 1''$$

The values of these quantities are tabulated in the seventh and eighth columns of Table VII.

For extreme accuracy  $P \sin 1''$  for the north side of the road should be taken out for a latitude greater by 1.50 chains, or  $0''\cdot98$  greater than that tabulated in Table III; but the difference in the result would be almost inappreciable.

The difference of length of the township lines north and south of the correction line road gives the overlap or jog.

The jog for one range is given in the ninth column of the table. As this jog occurs in each range of townships, its value at any range is the product of the jog for one range by the number of ranges.

The excess of the length of the north side over, or the defect of the south side from 489 chains, is the linear divergence or convergence of the township lines. Since there are twelve half sections in a township side, the convergence or divergence for one-half section is one-twelfth of the convergence or divergence for the township, or one-twenty-fourth of the jog, the excess of the north side and the defect of the south side being very nearly, though not quite, equal.

This convergence or divergence for one half section is entered in the tenth column of the table. It is used in the second system, where the surplus or deficiency caused by the convergence of meridians is divided equally among all the quarter-sections. Hence, in surveying a correction line under the second system, the width of each quarter section (exclusive of the roads) is forty chains *plus* or *minus* this tabulated quantity. The surplus or deficiency on the township line midway between the base and the correction line is half of that on the correction line.

In the first system the whole of the surplus or deficiency is thrown into the western tier of quarter sections. This surplus or deficiency is the difference between 489 chains and the quantities in the seventh and eighth columns of Table VII. For example, on the north side of the road on the 1st correction line the surplus is 1.75 chains, and the westerly quarter section of the township is therefore 41.75, all the others being 40 chains.

It is to be observed that in all cases the whole divergence or convergence is applied to the section itself, and that the road allowance retains its width of 1 chain or  $1\frac{1}{2}$  chains, with the exception of the roads on correction lines, which are subject to a widening or narrowing as hereinafter explained.

TABLE VIII.

*Chord Azimuths, Jogs, &c., for Correction Lines, Third and Fourth Systems of Survey.*

This table gives for the third and fourth systems the same quantities as are given in Table VII for the first and second systems.

The surplus or deficiency is in all cases divided equally among all the quarter sections.

TABLE IX.

*Latitudes, and Widths in Chains, of Northern Boundaries of Sections in First and Second Systems of Survey.*

This table gives the latitudes in degrees and decimals of a degree for the northern boundaries of all sections in the first and second systems.

The sections numbered in the second column are those adjacent to the eastern boundary of the township. The latitudes of interior sections lying west of these are the same. Thus the northern boundaries of sections 14, 15, 16, 17 and 18 have the same latitude as the north boundary of 13, and so for the other east and west tiers of sections.

These latitudes are computed by converting the latitudes given in Table III into degrees and decimals, and interpolating for the intermediate lines.



The logarithmic secant and tangent of the latitude are given in the table for use in calculation of azimuth observations.

In the last column of the table are given the widths of the north boundaries of the quarter sections (in the second system of survey). These are calculated for the correction lines in the manner explained under Table VII, and for the intermediate lines by interpolation.

TABLE X.

*Latitudes and Widths in Chains of Northern Boundaries of Sections in Third and Fourth Systems of Survey.*

This table gives for the third system the same quantities as are given in Table IX for the first and second.

The table may also be applied to the fourth system by correcting the latitudes of the alternate section lines, viz., the north boundaries of sections 1, 13 and 25 in each township, by subtracting therefrom  $0^{\circ}0001$ , the equivalent in arc of 50 links. The change in the logarithmic secant and tangent is inappreciable, as these logarithms are given to only five places of decimals. The widths of quarter sections in the last column must be increased by 50 links.

TABLE XI.

*To Reduce Chains to Decimals of a Township Side.*

This is a short table giving the equivalents of chained distances in terms of a township side, for township sides of the first and second systems (489 chains), for east and west lines of the third and fourth systems (486 chains) and for north and south lines of these last systems (483 chains). The table is useful in calculating the difference in azimuth of an east or west line between a township corner and any other point upon it, and for similar purposes.

TABLE XII.

*Correction to Widths of Roads on Correction Lines on Account of Curvature.*

The township corners on the north and south sides respectively of the road on correction lines lie on two circles of latitude, which are one and a-half chains apart in the first and second systems, and one chain apart in the third system. The township sides are chords of these circles, and therefore lie north of them.

Hence, since on account of the jog the township corners north and south of the road are not opposite to one another, the township side south of the road will pass the township corner north of the road at a distance less than the theoretical one chain; while the township side north of the road will pass the corner south of the road at a distance greater than one chain.

The correction to the width of the road on this account for various lengths of the jog, is given in the table. The width of the road at points other than the township corners, varies in proportion to the distance.

This table may be used where it is required to establish the posts on one side of a correction line, by offsets from the other side.

The calculation of the differences of width is made as described below for Table XIII, the difference being merely the offset from the township chord to the parallel.

In Table XII are also given corrections to the chord azimuths and deflection offsets on correction lines (given in Table VII), when the north side of the road allowance is surveyed instead of the south. The correction is small and of little importance in surveying, except in the case of the second system of survey, where the correction lines were surveyed instead of the base lines, as the basis of the townships, across four ranges before closing, and the azimuth was consequently of importance.

In the first system the correction line is surveyed across two ranges as a trial line, and afterwards corrected to the true line; and in the third system the correction line is only surveyed across one range at a time, and as a trial line. In these systems, therefore, the azimuth used in the survey is of little importance.

TABLE XIII.

*Difference of Latitude between Township Corners and Section and Quarter Section Corners.*

This table is used when it is required to find accurately the latitude of any point within a township, as when it is desired by connecting with an astronomically determined latitude point to find the error of the survey lines.

If  $A$  be the initial azimuth of the township chord,  $A^1$  its azimuth at a distance  $x$  from the corner of the township,  $\phi$  the latitude of the township corner,  $\phi^1$  the latitude of a point on the chord distant  $x$  from the corner.

Then by spherical trigonometry

$$\frac{\cos \phi^1}{\cos \phi} = \frac{\sin A}{\sin A^1}$$

whence

$$\tan \frac{\phi^1 - \phi}{2} \tan \frac{\phi^1 + \phi}{2} = \tan \frac{A^1 - A}{2} \cot \frac{A^1 + A}{2}$$

putting

$$\begin{aligned} A &= \frac{1}{2} (\pi - \theta) \\ A^1 &= \frac{1}{2} (\pi - \theta^1) \end{aligned}$$

where  $\theta$  and  $\theta^1$  are expressed in circular measure, and are very small, so that their cubes may be neglected. Also  $\phi^1 - \phi$  is very small, and  $\phi^1 + \phi$  is very nearly equal to  $2\phi$ .

$$\text{Then } \phi^1 - \phi = \frac{\theta - \theta^1}{2} \frac{\theta + \theta^1}{4} \cot \phi = \frac{\theta^2 - \theta_1^2}{8} \cot \phi$$

and  $\theta =$  convergence of meridians for one township chord;

$$\therefore \theta = \frac{c}{N} \tan \phi, \text{ } c \text{ being the length of the chord,}$$

$$\text{and } \frac{\theta_1}{\theta} = \frac{c - 2x}{c}, \text{ whence } \theta^2 - \theta_1^2 = \frac{4(c - x)x}{c^2} \theta^2$$

Therefore

$$\phi^1 - \phi = \frac{(c - x)x}{2N^2} \tan \phi$$

or difference of latitude in chains =

$$R(\phi^1 - \phi) = \frac{R}{2N^2} x(c - x) \tan \phi$$

The computation has been made for the first system of survey, but may be used for any system without sensible error.

### CHAPTER III.

#### PROBLEMS CONNECTED WITH THE SYSTEM OF SURVEY.

##### *Correction for Height above Sea Level.*

The tables have been calculated from the dimensions of the earth surface at sea level.

The township sides are actually measured on surfaces elevated above sea level, and therefore the differences of latitude and longitude calculated from the tables are greater than those actually covered by the township sides.

Any measured distance may be reduced to sea level by subtracting the correction  $\frac{h}{r} x$ ,  $x$  being the distance,  $h$  the elevation above sea level, and  $r$  the radius of curvature of the line under consideration.

In general  $N$  (see Table I) can be used instead of  $r$ .

Base lines when the system of survey is exactly followed are established by direct measurement from the 49th parallel, northward along an initial meridian.

Hence the latitude of a base line should be less than that given in table by  $(\psi - 49^\circ) \frac{h}{R}$  where  $h$  is the mean elevation of the initial meridian between the 49th parallel and the base under consideration.

Many base lines, however, have been established, not by this direct measurement, but by the survey of township meridians exterior from other bases. If the actual latitudes of these base lines are required, account must be taken of the elevations of all the north and south lines through which the connection with the 49th parallel has been made. It is obvious, however, that the average elevation of the country above the sea will give a sufficiently accurate result, since the small errors due to difference of elevation are masked by errors of survey.

On the base lines the effect of elevation above sea level is to decrease the difference of longitude covered by one range, and this must be allowed for in establishing an initial meridian by means of chainage along a base line, or in estimating the accuracy of measurement of a base line by its closing on an initial meridian, since the initial meridians, except the first, have been placed on even degrees of longitude (every fourth degree).

The correction for elevation above sea level is, in latitude  $51^\circ$ , 0.00382 chains for one mile distance at an elevation of 1,000 feet, and varies directly as the elevation and distance. It changes somewhat with the latitude, but slightly, and the correction in any particular case may be taken as the same as that for latitude  $51^\circ$ . If

extreme accuracy be required, the formula given above,  $\frac{h}{r} x$  may be used.

The error in the length of township chords of course involves an error in deflection angles and azimuths, but this is too small to be appreciable.

#### LATITUDES AND LONGITUDES OF POINTS IN THE SYSTEM.

By "points in the system" I mean the corners of specified sections, or points referred to them by connecting lines. In the latter case the lines, if short, may be reduced to latitude and longitude by means of "latitude and departure" from a traverse table, and by using Table XVIII.

Thus, the problem is reduced to the determination of the latitude and longitude of any section corner.

#### *Latitude.*

The latitude of the section corner can be at once found by interpolation from Table III or Table IV, according as the section is in the first, second or third system.

It must be remembered that in the first and second systems, the section posts on a meridian are 81.50 chains apart, and that in the third system they are alternately 81 and 80 chains.

The latitude can also be taken directly from Table IX or X to the fourth decimal place of degrees.

Since the section corners are presumed to be at distances of even sections from the north and south boundaries of the township, being established by survey from those boundaries, the latitude found as above must, when the section corner is not on the meridian outline of the township, be increased by the correction given by Table XIII.

In the first system the sections are not measured on meridians from the north or south boundary of the township, but on lines parallel to the eastern boundary of



the township. Hence theoretically the difference of latitude between the given corner and the township outline should be decreased in the ratio of cosine azimuth of the section line to unity; but this correction is practically insignificant. The correction for sea level may also be applied.

*Longitude, Third System,*

In the second and third systems the section lines are true meridians from the base line north and south two townships. Hence the longitude of a section corner is the same as that of the corresponding corner on the base line from which the township has been surveyed.

Then if  $d\lambda$  be the longitude covered by one range on that base line, and if  $n$  be the number of the range in which the section lies,  $m$  the number of sections lying between the given section and the eastern boundary of the township, the number of ranges which intervene between the initial meridian and the eastern boundary of the given section is  $n - 1 + \frac{m}{6}$ , and the difference in longitude between it and the initial meridian is  $(n - 1 + \frac{m}{6})d\lambda$ . This added to the longitude of the initial meridian gives the longitude of the eastern boundary of the section.

The longitude of the Principal or First Meridian is  $97^\circ 27' 08''.4$ ,

The longitudes of the Second, Third, Fourth, &c., Meridians are  $102^\circ, 106^\circ, 110^\circ, 114^\circ$ , &c., subject to certain errors of survey, which cannot be discussed at present.

The difference of longitude should be corrected for height above sea if precision is required. This can be done by multiplying it by  $(1 - \frac{h}{N})$

For example:

The N.E. corner of Sec. 16, Tp. 23, R. 17, W. of the Fourth Meridian (third system of survey). Here  $n = 17$ ,  $m = 3$ , and the township is surveyed from the 7th base, for which we find from Table IV  $d\lambda = 8' 22''.411 = 502''.411$ . Therefore longitude of the section line

$$= 110^\circ + (502''.411 \times 16\frac{2}{3}) = 112^\circ 18' 09''.78.$$

The corner is three sections, i.e., 242 chains north of the 5th correction line, and its latitude is therefore (from Table IV)

$$50^\circ 34' 20''.77 + 10' 28''.88 \times \frac{242}{966} = 50^\circ 34' 20''.77 + 157''.55 = 50^\circ 36' 58''.32''.$$

*Longitude, First System.*

In the first system the procedure for the longitude is a little different. The section lines are drawn parallel to the east side of the township, so that the difference of longitude between the section line and the east boundary of the township is not the same as on the base line, but is equal to the actual distance from the boundary of the township divided by  $P \sin 1''$ ,  $P \sin''$  being taken from Table I for the actual latitude of the section post. Thus using the same notation as before

Diff. of longitude from initial meridian  $= (n - 1)d\lambda + \frac{81 \cdot 50 \times m}{P \sin 1''}$ ,  $d\lambda$  being taken from Table III (1st system) for the governing base line, or it may be calculated by the equivalent formula

$$\text{diff. of longitude} = (n - 1 + \frac{m}{6})d\lambda + \frac{Q}{P \sin 1''}$$

where  $Q = 2m(40 - w)$ ,  $w$  being the width of quarter sections as taken from the last column of Table IX.

*Longitude, Second and Fourth Systems.*

Longitudes in the 2nd system are calculated in the same way as those in the 3rd, taking  $d\lambda$  from Table III instead of Table IV. In the 4th system the process is the same, as for the 3rd system, and the same table is used—Table IV.

*Effect of Errors of Survey.*

An error in the latitude of the base line, or an error in the longitude of the initial meridian, of course increases or decreases by the amount of the error the latitude or longitude of the section corner. Similarly a chainage error on the base line affects the longitude directly. In the computation all known errors of this kind must be allowed for.

An error in the latitude of the base line also affects the longitude covered by 486 chains (or 489) chains measured along the base line, since 486 chains covers less longitude if the base line be moved north. The manner in which the effect of an error of this kind may be estimated will be best shown by an example.

Suppose the 6th base line (3rd system) to be placed 10 chains too far north, we find from Table IV

$$d\lambda, \text{ for 6th base line} = 498.662$$

$$d\lambda \text{ for 6th correction line} = 500.527$$

The 6th correction line is two townships, *i.e.*, 966 chains north of the 6th base line, and the difference in  $d\lambda$  for these lines is  $1''.865$ . Therefore,  $d\lambda$  for the actual position of the 6th base line, 10 chains north of its theoretical position, is

$$498''.662 + 1''.865 \times \frac{10}{966} = 498''.681$$

The correction, in the case supposed, to  $d\lambda$  for one range is  $0''.019$ , and in 29 ranges, (about the distance apart of two initial meridians) it amounts to  $0''.019 \times 29 = 0''.55$ , or 54 links.

GIVEN THE LATITUDE AND LONGITUDE OF A POINT, TO FIND ITS POSITION WITH REGARD TO THE SURVEY SYSTEM, *i.e.*, to find in what section it is, and the township and range, and its distance from the N. E. corner of the section.

*Second, Third and Fourth Systems.*

This is the converse of the preceding problem. The first step is to find, in the manner explained above, the latitude of the section line next north of the given latitude. The difference between these two latitudes is reduced to chains by Table I. This gives the distance ( $x$ ) in chains to be measured from the point to find the north boundary of the section.

The number of sections by which the section line is north of the southern boundary of the township in which it lies is to be noted. Call this number  $a$ , and the number of the township  $t$ .

We also know the number of the nearest base line, *i.e.* the base line on which depends the survey of township  $t$ . From table IV we take out  $d\lambda$  for this base line.

From the given longitude of the point subtract the longitude of the initial meridian. Divide the difference by  $d\lambda$ , with quotient  $n$  and remainder  $r$ . Divide  $r$  by  $\frac{d\lambda}{6}$  with quotient  $b$  and remainder  $s$ .  $S$  reduced from seconds of longitude to

chains by Table I, with argument, latitude of the given point, gives the distance ( $y$ ) to be measured east from the point to find the eastern line of the section.

We now know that the given point is  $x$  chains south and  $y$  chains west of the north-east angle of some section in township No.  $t$  and range No.  $(n + 1)$  west of the initial meridian; and also that the northern boundary of the section is  $a$  sections north of the southern boundary of the township, and that the eastern boundary is  $b$  sections west of the eastern boundary of the township.



It is now easy by means of a skeleton township diagram to determine the numbers of the section; *e.g.* if  $a = 5$ ,  $b = 3$ , the section is 28.

Without a township diagram, the section number can be found from the formula

$$\text{No. of section} = \frac{1}{2} \left\{ 12a - 5 \pm (2b - 5) \right\}$$

The upper sign being taken when  $a$  is odd, and the lower when  $a$  is even. These two rules are comprised in the general formula

$$\text{No. of section} = \frac{1}{2} \left\{ (12a - 5) - (-1)^a (2b - 5) \right\}$$

The calculation for the second system is the same as above, using the proper tables for that system. It is also the same for the fourth system.

In this manner have been computed the positions of a great many section corners in British Columbia (fourth system of survey) with reference to points along the line of the Canadian Pacific Railway, the latitudes and longitudes of these points having been first determined by a traverse survey.

#### *First System of Survey.*

The procedure in this system is the same as above, except that the total difference of longitude from the eastern boundary of the township (instead of the nearest section line) must be reduced to chains, and from the chain distance must be subtracted the nearest multiple of 81.50.

#### FRACTIONAL TOWNSHIP OR RANGE BETWEEN PARTS OF THE COUNTRY SURVEYED UNDER DIFFERENT SYSTEMS OF SURVEY.

Townships of the first and second systems adjoin each other without overlap or deficiency, since the townships in these two systems are of the same dimensions. Similarly of the third and fourth systems.

But where townships surveyed under the latter systems abut on townships of the first or second system, a fractional township or range occurs. It is only necessary to consider the case of the third system abutting on the first or second, since the fourth does not occur in juxtaposition with these latter systems.

#### *Fractional Township.*

Townships of the third system are 6 chains shorter, measured north and south than the others. The townships in both cases are measured north from the 49th parallel, and hence the third system falls short of the other by 6 chains for each township, and the northern boundary of a township of the third system is therefore south of the northern boundary of the same township of the first or second system by 6 chains multiplied by the number of the township.

Thus the 5th correction line (Tp. 18), as surveyed under the third system, is  $6 \times 18 = 108$  chains south of its position under the second system. For twelve ranges west of the Second Meridian, the territory from the 5th correction line northward to the 8th correction line was surveyed under the second system, while the country south of the former line has been surveyed under the third system. There is therefore an additional township (measuring 108 chains from north to south) lying between Township 18 of the third system and Township 19A, and is subdivided according to the third system. See Manual of Surveys.)

#### *Fractional Range.*

Townships of the third system are 3 chains narrower (measured east and west along the base line) than those of the first and second systems. The overlap of the latter systems over the third, however, is not equal to 3 chains multiplied by the number of ranges, but exceeds this, since the widths are laid off along base lines which lie in different latitudes, and hence the convergence of meridians comes into play.



The readiest method of calculating this overlap is as follows:—

Let  $d\lambda_1$  be the longitude covered by one range of the base line in the first or second system as found from Table III.

Let  $d\lambda$  be the same quantity for the base line of the third system (from Table IV).

Then  $d\lambda_1 - d\lambda$  is the difference of the longitude between the exterior meridians of range one, as surveyed under the two systems.

The difference of longitude at the eastern boundary of the  $n$ th range will be  $(n - 1) (d\lambda_1 - d\lambda)$

This reduced to chains is

$$(n - 1) (d\lambda_1 - d\lambda) P \sin 1''$$

$P \sin 1''$  being taken from the proper table for the latitude of the base or section line on which the overlap is required.

### Example.

The meridian outline between Ranges 12 and 13, west of the 2nd Meridian, from Township 19 to Township 22, inclusive, is the western boundary of a tract of country surveyed under the second system of survey. Required the width of Range 13, as surveyed under the third system, on the northern boundaries of Townships 19, 20, 21 and 22.

The base line on which this meridian outline is based, is the 6th base line, or northern boundary of Township 20.

From Table III,  $d\lambda_1 = 8' 21'' \cdot 972$

do IV,  $d\lambda = 8' 18'' \cdot 662$

$$\text{whence } d\lambda_1 - d\lambda = 3'' \cdot 310$$

and at the eastern boundary of the thirteenth range, the difference of longitude is  $3 \cdot 310 \times 12 = 39'' \cdot 72$ .

We have then for the northern boundary of Township 19 (third system):

$$\text{Log. } 39 \cdot 72 = 1 \cdot 5990092$$

$$\text{Table IV, Log. } P \sin 1'' = 9 \cdot 9896352$$

$$1 \cdot 5886444$$

$$\text{Nat. number} = 38 \cdot 783$$

For the northern boundary of Township 20:

$$\text{Log. } 39 \cdot 72 = 1 \cdot 5990092$$

$$\text{Log. } P \sin 1'' = 9 \cdot 9888297$$

$$1 \cdot 5878389$$

$$\text{Nat. number} = 38 \cdot 711$$

For the northern boundary of Township 21:

$$\text{Log. } 39 \cdot 72 = 1 \cdot 5990092$$

$$\text{Log. } P \sin 1'' = 9 \cdot 9880192$$

$$1 \cdot 5870284$$

$$\text{Nat. number} = 38 \cdot 639$$

For the northern boundary of Township 22:

$$\text{Log. } 39 \cdot 72 = 1 \cdot 5990092$$

$$\text{Log. } P \sin 1'' = 9 \cdot 9872086$$

$$1 \cdot 5862178$$

$$\text{Nat. number} = 38 \cdot 567$$

Hence the north boundaries of Townships 19, 20, 21 and 22, surveyed under the third system in Range 13, have their eastern tiers of section narrowed by 38·783, 38·711, 38·639 and 38·567, respectively.

Now, the full widths of these sections when regular is got from Table X, by multiplying the "width of quarter section" by 2.

Thus, the width of the eastern tier of sections in Range 13 are:

For Township 19, 80.15	— 38.78	= 41.37	chains.
do 20, 80.	— 38.71	= 41.29	do
do 21, 79.85	— 38.64	= 41.21	do
do 22, 79.70	— 38.57	= 41.13	do

These widths must be increased by one chain for road, if the widths from post to post are required.

For the township lines to the north of the correction line, viz.: 23, 24, 25 and 26, the width of Range 13 may be found in the same way, using the  $d\lambda$  from Tables III and IV for the seventh base instead of the sixth.

If the width of the section on the north side of the 6th correction line is required, that is, the south boundary of Township 23, it must be remembered that here, on account of the correction line being thrown south, from the less depth of the townships of the new system, the southern boundary of Township 23 of the third system, which is brought from the 7th base, intersects the second system south of the correction line, *i. e.* on a line brought from the 6th base.

Therefore we have

For the second system, Table III, $d\lambda_1$	6th base	= 8' 21" .972
third do do IV, $d\lambda$	7th do	= 8' 22" .411

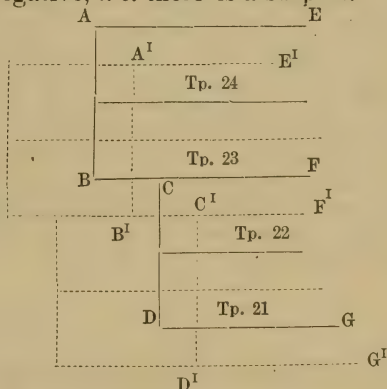
$$\therefore d\lambda_1 - d\lambda = \text{---} .439$$

$$\text{and for twelve ranges 12 } (d\lambda_1 - d\lambda) = \text{---} 5'' .268$$

With the difference of longitude  $5'' .268$  and the  $P \sin 1''$  for the 6th correction line, third system, we get the required jog.

It will be noticed that the overplus is negative, *i. e.* there is a surplus.

The heavy lines represent the second system, the dotted ones the third. The line  $A^1B^1$  is the one which we have just considered; it falls to the east of AB, but to the west of CD.



The lines in the figure are all township lines. Thus it will be seen that there is a small piece of land,  $B^1C$ , which is in fact a township of itself. Its designation would be Township 23 A, Range 12.

### Second Example.

Required the depth, north and south, of Township 27, Range 19, west of the Principal Meridian.

The north boundary of Township 26 is the northern boundary of a tract of country surveyed under the first system.

Since each township of the third system is 6 chains shorter north and south than one of the first system, the northern boundary of Township 26 in the third system is  $6 \times 26 = 156$  chains south of the same boundary under the first system.

Therefore the distance from the north boundary of Township 26, first system, to the north-east angle of Section 12, Township 27, third system, is  $161 - 156 = 5$  chains.

Since 1.50 chains must be allowed for road 3.50 chains is the available width of the strip of land.

## FRACTIONAL SECTIONS ADJOINING AN INITIAL MERIDIAN.

The longitude of the Principal Meridian is  $97^{\circ} 27' 08'' \cdot 4$ .

That of the 2nd Initial Meridian  $102^{\circ} 00' 00''$

“ 3rd “  $106^{\circ} 00' 00''$

“ 4th “  $110^{\circ} 00' 00''$

“ 5th “  $114^{\circ} 00' 00''$

“ 6th “  $118^{\circ} 00' 00''$

“ 7th “  $122^{\circ} 00' 00''$

These longitudes are subject to correction for errors of survey, of which it is intended to treat in a future paper.

For the present purpose we shall use the above longitudes.

The difference of longitude between the first meridian and the second is  $4^{\circ} 32' 51'' \cdot 6 = 16371'' \cdot 6$ , and between the others successively  $4^{\circ} = 14400''$ .

The width of the last range in seconds on a given base line is got by subtracting from  $16371'' \cdot 6$  or  $14400$  the nearest integral multiple of  $d\lambda$  as given by Table III or IV (according to which system of survey is used). Thus for the width of the last range on the 5th base line between the 2nd and 3rd Initial Meridians (third system of survey) we have from Table IV  $d\lambda = 494'' \cdot 988$  and we find, by dividing  $14400$  by  $494 \cdot 988$ , a quotient  $29$  with remainder  $45 \cdot 348$ . That is, the width of Range 30 on the 5th base, or the difference of longitude between the 3rd Initial Meridian and the meridian forming the eastern boundary of Townships 15, 16, 17 and 18, Range 30, west of the second Initial Meridian is  $45'' \cdot 348$ . This can be converted into chains by multiplying by  $\log P \sin 1''$ , taken from Table IV for the section line whose length is required—whether the southern boundary of Township 15, or the northern boundary of Townships 15, 16, 17 or 18, or any of the intermediate section lines.

If the width of the last broken section be required, and if the remainder, after tracting the integral multiple of  $d\lambda$  is greater than one sixth of  $d\lambda$ , integral multiples of  $\frac{1}{6} d\lambda$  (difference of longitude covered by one section on the base line) must be subtracted until the remainder is less than  $\frac{1}{6} d\lambda$ . This remainder may then be converted to chains by multiplying by  $P \sin 1''$  taken out of the Table for the latitude of the line under consideration. The reason for this is that the widths in seconds of longitude are the same for all sections from the base to the correction line (in the third system).

The result thus found should be corrected for the mean height of the base line above sea level, and also for any error in the positions of the 2nd and 3rd Meridians, relative to each other.

## CHAPTER IV.

## SOLUTIONS OF SOME PROBLEMS IN PRACTICAL GEODESY.

GIVEN THE LATITUDE AND LONGITUDE OF A POINT ON THE EARTH'S SURFACE, AND THE DISTANCE AND AZIMUTH THEREFROM OF A SECOND POINT, *required the latitude and longitude of the second point and the azimuth of the first point as seen from the second.*

The earth being considered a sphere, with radius equal to the normal at the place ( $N$ ), the distance ( $K$ ) may be reduced to arc by the formula

$$u'' = \frac{K}{N \sin 1''}$$

Then we have a spherical triangle formed by the two points and the north (or south) pole of the earth, the sides being the colatitudes of the points ( $90^{\circ} - \phi$  and  $90^{\circ} - \phi'$ ) and  $u''$ ; and the angles being the azimuths counted from the north of the points from one another, and the difference of longitude. Any three of these parts being given, the triangle may be solved by the usual formulæ of spheric trigonometry.

Since, however, the side  $u''$  is very small compared with the radius of the sphere, and therefore the triangle cannot be accurately solved without logarithms of many



decimal places, a more practical solution can be obtained by expanding the difference of latitude, &c., in series:—

We then have for distances not much exceeding 20 miles

$$\phi = \Phi + u' \cos A - (u'' \sin A)^2 \sin 1'' \tan \Phi$$

$$\lambda' = \lambda - (u'' \sin A) \sec \Phi'$$

$$A' = 180^\circ + A + (u'' \sin A) \sec \Phi' \sin \frac{1}{2} (\Phi + \Phi')$$

Where  $\Phi$  and  $\lambda$  are the latitude and longitude respectively of the first point  
 $\Phi'$  and  $\lambda'$  those of the second point

$A$  the azimuth of the second as seen from the first

$A'$  do first do second

Longitudes being counted towards the west, and azimuths from the north through east from  $0^\circ$  to  $360^\circ$ .

### Correction for Spheroidal Figure.

The above formulæ are derived on the assumption that the earth is a sphere. The solution for the spheroid can be obtained by applying a correction to the difference of latitude. There is no correction necessary, to the order of approximation of the formulæ given above, to either the difference of longitude or the difference of azimuth.

The spherical solution being made on a sphere whose radius is equal to the normal ( $N$ ) at the place, which is the radius of the great circle perpendicular to the meridian, while the latitude is measured along the meridian, whose radius of curvature is  $R$ , the difference of latitude found as above must be multiplied by  $\frac{N}{R} = 1 + e^2 \cos^2 \Phi$  nearly, or in other words  $\Phi' - \Phi$  must be numerically increased by  $e^2 \cos^2 \Phi (\Phi' - \Phi)$ .

The spheroidal formulæ then become

$$\Phi' = \Phi + u' \cos A - (u'' \sin A)^2 \sin 1'' \tan \Phi + e^2 \cos^2 \Phi \{ u'' \cos A - (u'' \sin A)^2 \sin 1'' \tan \Phi \}$$

$$\lambda' = \lambda - (u'' \sin A) \sec \Phi'$$

$$A' = 180^\circ + A + (u'' \sin A) \sec \Phi' \sin \frac{1}{2} (\Phi + \Phi')$$

The values of  $e^2 \cos^2 \Phi$  for different latitudes, are:—

$\Phi$	$e^2 \cos^2 \Phi$	$\Phi$	$e^2 \cos^2 \Phi$	$\Phi$	$e^2 \cos^2 \Phi$	$\Phi$	$e^2 \cos^2 \Phi$	$\Phi$	$e^2 \cos^2 \Phi$
42	000376	48	000305	54	000235	60	000170	66	000113
43	365	49	293	55	224	61	160	67	104
44	353	50	282	56	213	62	150	68	096
45	341	51	270	57	202	63	140	69	088
46	329	52	258	58	191	64	131	70	080
47	317	53	247	59	181	65	122		

### More Accurate Formulæ for Long Distances.

The above formulæ serve for distances not greater than say twenty miles. For longer distances, up to one hundred miles, the formulæ are (see "Lee's Table and Formulæ, Professional Papers of the United States' Engineers; and United States' Coast and Geodetic Survey, 1875," Appendix No. 19)—

$$\Phi' - \Phi = KB \cos A - K^2 C \sin^2 A - (\delta \Phi)^2 D + K^2 h E \sin^2 A,$$

$$\lambda' - \lambda = \frac{K \sin A}{N' \sin 1'' \cos \Phi'}$$

$$A' = 180^\circ + A - (\lambda' - \lambda) \frac{\sin \frac{1}{2} (\Phi + \Phi')}{\cos \frac{1}{2} (\Phi' - \Phi)} + (\lambda' - \lambda)^3 F$$

[PART VI]

Where  $K$  = the distance

$$B = \frac{1}{R \sin 1''} \text{ for the latitude of the initial point,}$$

$$C = \frac{\tan \phi}{2 NR \sin 1''} \quad \text{do}$$

$$D = \frac{\frac{3}{2} e^2 \sin \phi \cos \phi \sin 1''}{(1 - e^2 \sin^2 \phi)^{\frac{3}{2}}} \quad \text{do}$$

$$E = \frac{1 + 3 \tan^2 \phi}{6 N^2} \quad \text{do}$$

$b = KB \cos A$ , or the first term of the expression for difference of latitude.

$\delta \phi$  is an approximate value of  $\phi' - \phi$ , computed from the first and second terms of the expression.

$N \sin 1''$  is taken for the latitude of the terminal point.

$\log F$ , for latitude  $45^\circ = 7.840$ ; for latitude  $50^\circ = 7.792$ ; for latitude  $55^\circ = 7.723$ .

$\log e^2 = 7.8305006$

$\log \sin 1'' = 4.6855749$

The computation can be made by means of Table I, but more conveniently by means of the tables of the values of  $B$ ,  $C$ ,  $D$  and  $E$ , which are given in the United States Coast Survey Appendix above named.

It is to be noted that in the formulæ given in that appendix, the azimuth is counted from the south through west, while in those I have given for the shorter distances it is counted from north through east, conformably to the general practice in Dominion Land surveys. Hence as  $A$  is increased by  $180^\circ$ , the sign of  $\cos A$  and  $\sin A$  is changed.

#### *Formulæ in Terms of Rectangular Co-ordinates.*

Suppose the latitude and longitude ( $\phi$  and  $\lambda$ ) of one point to be known, and the second point to be referred to the first by rectangular co-ordinates,  $y$  in direction of the meridian and  $x$  perpendicular to it,  $y$  being positive when measured north from the first point, and  $x$  positive when measured west.

$$\text{Then } \phi' = \phi + \frac{y}{R \sin 1''} - \frac{1}{2} \sin 1'' \tan \phi' \left( \frac{x}{N \sin 1''} \right)^2 \frac{N \sin 1''}{R \sin 1''}$$

$$\lambda' = \lambda + \left( \frac{x}{N \sin 1''} \right) \sec \phi'$$

$$A' = 180^\circ + A - \left( \frac{x}{N \sin 1''} \right) \tan \phi'$$

The expression for  $\phi'$  contains  $\phi'$ , the quantity sought, in the last term. The value of  $\phi'$  to be used in computing this term is the approximate value of  $\phi'$  obtained from the first two terms  $\phi + \frac{y}{R \sin 1''}$ .

These formulæ may be used for differences of latitude and longitude on a traverse survey consisting of a number of short lines.

The co-ordinates with reference to the meridian of one of the points may be computed by summing the "latitudes and departures" taken from an ordinary traverse table for the several courses.

GIVEN THE LATITUDES AND LONGITUDES OF TWO POINTS, to find the length and direction of their joining line.

Let  $\phi$  and  $\phi'$  be the latitudes.

$\lambda$  and  $\lambda'$  be the longitudes.

Then  $(\phi' - \phi)$  multiplied by the factor  $e^2 \cos^2 \phi$  given in the table on page —, is the correction to the latitude to reduce it from the spheroid to the sphere. Half

of this correction is to be applied to each latitude, in such direction as to bring them nearer together.

We then have, calling these corrected latitudes  $l$  and  $l'$ , and  $(\Phi' - \Phi) e^2 \cos^2 \Phi = \beta$

$$l = \Phi + \frac{\beta}{2}$$

$$\tan A = \frac{-(\lambda' - \lambda) \cos e'}{l' - l - \frac{1}{2} \sin 1'' (\lambda' - \lambda)^2 \cos^2 l' \tan l}$$

$$l' = \Phi' - \frac{\beta}{2}$$

$$K = - \frac{(\lambda' - \lambda) \cos l'}{\sin A} N \sin 1''$$

$$A' = 180^\circ + A - (\lambda' - \lambda) \sin \frac{l + l'}{2}$$

$N \sin 1''$  should be taken for the mean latitude  $\frac{\Phi + \Phi'}{2}$ ; so also  $e^2 \cos^2 \Phi$ , although the difference in this latter will be inappreciable unless the difference of latitude is great.

KNOWING THE LATITUDES AND THE AZIMUTH of one point from the other, to find the distance.

Calculate  $\beta$  and  $l$  and  $l'$  as in the last case.

Find the auxiliary angles  $\theta$  and  $\theta - u$  from the equations

$$\tan \theta = - \frac{\tan l}{\cos A}$$

$$\sin (\theta - u) = \frac{\sin l'}{\sin l} \sin \theta$$

Whence  $u$  is known

then  $K = u N \sin 1''$ .

That value of  $\theta$  is to be taken which is less than  $90^\circ$ , i. e., if  $\tan \theta$  be positive (when  $\cos A$  is negative)  $\theta$  will be a positive angle less than  $90^\circ$ . If  $\tan \theta$  be negative,  $\theta$  will be a negative angle. In the latter case the formula

$$\sin (\theta - u) = \frac{\sin l'}{\sin l} \sin \theta$$

$$\text{becomes } \sin (\theta + u) = \frac{\sin l'}{\sin l} \sin \theta, \theta \text{ in this last being taken positively.}$$

GIVEN THE LATITUDE OF ONE POINT, THE AZIMUTH FROM THIS TO THE OTHER, AND THE DIFFERENCE OF LONGITUDE, to find the distance.

That is, given  $\Phi$ ,  $\lambda' - \lambda$ , and  $A$  to find  $\Phi'$ ,  $A'$  and  $K$ .

Let  $d\lambda$  be the difference of longitude. The auxiliary angle  $\theta$  is computed by the formula

$$\tan \theta = - \sin l \tan A.$$

$$\text{and } \tan a' = \frac{\tan \Phi \sin (\theta - d\lambda)}{\sin \theta}$$

$$\beta = (a' - \Phi) e^2 \cos^2 \frac{1}{2} (a' + \Phi)$$

$$\Phi' = a' + \frac{\beta}{2}, l = \Phi + \frac{\beta}{2}, l' = \Phi' - \frac{\beta}{2}$$

$$K = - d\lambda \frac{\cos l'}{\sin A} N \sin 1''.$$



## TRIGONOMETRICAL LEVELLING.

To find the elevation of one station above another by observation of the apparent altitude.

Let  $K$  represent the distance apart of the two stations,  $C$  the angle subtended by the arc joining the two stations at the earth's centre (*i. e.*, more properly at the centre of the curvature of the arc):

Let  $m$  = the coefficient of refraction.

$dh$  = difference of height of the two stations.

$S$  = radius of curvature of the arc joining the stations.

$E$  = measured angle of elevation.

$$\text{Then } C = \frac{K}{S \sin 1''}$$

$$dh = \frac{K \sin \left\{ E + \left( \frac{1}{2} - m \right) C \right\}}{\cos \left\{ E + (1 - m) C \right\}}$$

$S$ , the radius of curvature of the arc, is found from  $R$  and  $N$ , given the azimuth of the arc, in the manner explained under Table I, but for ordinary purposes

$N \sin 1''$  or  $R \sin 1''$  may be used instead of  $S \sin 1''$ .

$m$  varies in different places, being greater at the sea coast than in the interior. It runs from about .065 to about .080. Where accuracy is required it must be found by observation in the locality, by the method of reciprocal zenith distances, or otherwise.

Taking its value at .070, the above formula becomes:

$$dh = \frac{K \sin (E + 0.43 C)}{\cos (E + 0.93 C)}$$

If the angle observed be an angle of depression instead of elevation, we have calling the observed angle  $D$ :

$$dh = \frac{-K \sin (D - 0.43 C)}{\cos (D - 0.93 C)}$$

APPENDIX—TABLES.

TABLE I.—Radii of Curvature of Méridians and Parallels, &c.

Latitude.	log N sin 1".	log P sin 1".	log R sin 1".	Chains in 1".		Seconds in one Chain.		English Miles in a Degree.	
				Lat- itude.	Long- itude.	Lat- itude.	Long- itude.	Lat- itude.	Long- itude.
°						"	"		
42 00	0.1873775	0.0584510	0.1857461	1.5337	1.1441	0.6520	0.8741	69.02	51.48
42 10	3818	73144	7589	1.5338	1.1411	0.6520	0.8764	69.02	51.35
42 20	3860	61711	7717	1.5338	1.1381	0.6520	0.8787	69.02	51.21
42 30	3903	50212	7845	1.5339	1.1351	0.6520	0.8810	69.02	51.08
42 40	3946	38645	7973	1.5339	1.1320	0.6519	0.8834	69.03	50.94
42 50	3988	27009	8101	1.5339	1.1290	0.6519	0.8857	69.03	50.81
43 00	4031	15306	8230	1.5340	1.1260	0.6519	0.8881	69.03	50.67
43 10	4074	0.0503534	8358	1.5340	1.1229	0.6519	0.8905	69.03	50.53
43 20	4117	0.0491693	8487	1.5341	1.1199	0.6519	0.8930	69.03	50.39
43 30	4160	79782	8615	1.5341	1.1168	0.6518	0.8954	69.04	50.26
43 40	4203	67802	8744	1.5342	1.1137	0.6518	0.8979	69.04	50.12
43 50	4245	55750	8872	1.5342	1.1106	0.6518	0.9004	69.04	49.98
44 00	4288	43629	9001	1.5343	1.1075	0.6518	0.9029	69.04	49.84
44 10	4331	31437	9129	1.5343	1.1044	0.6518	0.9054	69.04	49.70
44 20	4374	19173	9258	1.5344	1.1013	0.6517	0.9080	69.05	49.56
44 30	4417	0.0406838	9387	1.5344	1.0982	0.6517	0.9106	69.05	49.42
44 40	4460	0.0394430	9515	1.5344	1.0951	0.6517	0.9132	69.05	49.28
44 50	4503	81949	9644	1.5345	1.0919	0.6517	0.9158	69.05	49.14
45 00	4546	69396	9773	1.5345	1.0888	0.6517	0.9185	69.05	49.00
45 10	4588	56768	0.1859901	1.5346	1.0856	0.6516	0.9211	69.06	48.85
45 20	4631	44067	0.1860030	1.5346	1.0824	0.6516	0.9238	69.06	48.71
45 30	4674	31292	0159	1.5347	1.0793	0.6516	0.9266	69.06	48.57
45 40	4717	18442	0288	1.5347	1.0761	0.6516	0.9293	69.06	48.42
45 50	4760	0.0305517	0416	1.5348	1.0729	0.6516	0.9321	69.06	48.28
46 00	4803	0.0292516	0545	1.5348	1.0697	0.6515	0.9349	69.07	48.14
46 10	4846	79439	0673	1.5349	1.0665	0.6515	0.9377	69.07	47.99
46 20	4889	66285	0802	1.5349	1.0632	0.6515	0.9405	69.07	47.85
46 30	4932	53054	0931	1.5349	1.0600	0.6515	0.9434	69.07	47.70
46 40	4974	39745	1059	1.5350	1.0568	0.6515	0.9463	69.07	47.55
46 50	5017	26358	1188	1.5350	1.0535	0.6515	0.9492	69.08	47.41
47 00	5060	0.0212893	1316	1.5351	1.0502	0.6514	0.9522	69.08	47.26
47 10	5103	0.0199349	1445	1.5351	1.0470	0.6514	0.9551	69.08	47.11
47 20	5146	85726	1573	1.5352	1.0437	0.6514	0.9581	69.08	46.97
47 30	5188	72021	1701	1.5352	1.0404	0.6514	0.9612	69.08	46.82
47 40	5231	58237	1829	1.5353	1.0371	0.6514	0.9642	69.09	46.67
47 50	5274	44372	1957	1.5353	1.0338	0.6513	0.9673	69.09	46.52
48 00	5316	30425	2085	1.5354	1.0305	0.6513	0.9704	69.09	46.37
48 10	5359	16396	2214	1.5354	1.0272	0.6513	0.9736	69.09	46.22
48 20	5402	0.0102285	2341	1.5354	1.0238	0.6513	0.9767	69.09	46.07
48 30	5444	0.0088090	2469	1.5355	1.0205	0.6513	0.9799	69.10	45.92
48 40	5487	73812	2598	1.5355	1.0171	0.6512	0.9831	69.10	45.77
48 50	5530	59449	2725	1.5356	1.0138	0.6512	0.9864	69.10	45.62
49 00	5572	45001	2852	1.5356	1.0104	0.6512	0.9897	69.10	45.47
49 10	5615	30469	2980	1.5357	1.0070	0.6512	0.9930	69.11	45.32
49 20	5657	15849	3106	1.5357	1.0037	0.6512	0.9964	69.11	45.16
49 30	5699	0.0001143	3234	1.5358	1.0003	0.6511	0.9998	69.11	45.01
49 40	5742	9.9986351	3361	1.5358	0.9969	0.6511	1.0031	69.11	44.86
49 50	5784	71470	3488	1.5358	0.9935	0.6511	1.0066	69.11	44.71
50 00	5826	56501	3615	1.5359	0.9900	0.6511	1.0101	69.12	44.55
50 10	5869	41444	3742	1.5359	0.9866	0.6511	1.0136	69.12	44.40
50 20	5911	26296	3870	1.5360	0.9832	0.6510	1.0171	69.12	44.24
50 30	5953	9.9911058	3995	1.5360	0.9797	0.6510	1.0207	69.12	44.09
50 40	5995	9.9895730	4122	1.5361	0.9763	0.6510	1.0243	69.12	43.93
50 50	6037	80309	4248	1.5361	0.9728	0.6510	1.0279	69.13	43.78
51 00	6079	64797	4374	1.5362	0.9693	0.6510	1.0316	69.13	43.62
51 10	6121	49192	4500	1.5362	0.9659	0.6510	1.0353	69.13	43.46
51 20	6163	33493	4626	1.5363	0.9624	0.6509	1.0391	69.13	43.31
51 30	6205	17701	4751	1.5363	0.9589	0.6509	1.0429	69.13	43.15
51 40	6247	9.9801813	4877	1.5363	0.9554	0.6509	1.0467	69.14	42.99
51 50	6289	9.9785830	5002	1.5364	0.9519	0.6509	1.0506	69.14	42.83
52 00	6330	69750	5127	1.5364	0.9484	0.6509	1.0544	69.14	42.68

## APPENDIX—TABLES.

TABLE I.—Radii of Curvature of Meridians and Parallels, &amp;c.

Latitude.	log N sin 1".	log P sin 1".	log R sin 1".	Chains in 1".		Seconds in one Chain.		English Miles in a Degree.	
				Lat- itude.	Long- itude.	Lat- itude.	Long- itude.	Lat- itude.	Long- itude.
°						"	"		
52 10	0·1876372	9·9753574	0·1865252	1·5365	0·9448	0·6508	1·0584	69·14	42·52
52 20	6413	37299	5376	1·5365	0·9413	0·6508	1·0624	69·14	42·36
52 30	6455	20926	5501	1·5366	0·9378	0·6508	1·0664	69·15	42·20
52 40	6496	9·9704454	5625	1·5366	0·9342	0·6508	1·0704	69·15	42·04
52 50	6538	9·9687882	5749	1·5366	0·9307	0·6508	1·0745	69·15	41·88
53 00	6579	71208	5873	1·5367	0·9271	0·6507	1·0786	69·15	41·72
53 10	6620	54435	5997	1·5367	0·9235	0·6507	1·0828	69·15	41·56
53 20	6661	37558	6120	1·5368	0·9199	0·6507	1·0870	69·16	41·40
53 30	6703	20579	6244	1·5368	0·9163	0·6507	1·0913	69·16	41·24
53 40	6744	9·9603495	6367	1·5369	0·9127	0·6507	1·0956	66·16	41·07
53 50	6785	9·9586307	6490	1·5369	0·9091	0·6507	1·0999	69·16	40·91
54 00	6825	69012	6612	1·5370	0·9055	0·6506	1·1043	69·16	40·75
54 10	6866	51612	6735	1·5370	0·9019	0·6506	1·1088	69·16	40·59
54 20	6907	34104	6857	1·5370	0·8983	0·6506	1·1132	69·17	40·42
54 30	6948	9·9516488	6979	1·5371	0·8946	0·6506	1·1178	69·17	40·26
54 40	6988	9·9498764	7101	1·5371	0·8910	0·6506	1·1223	69·17	40·09
54 50	7029	80928	7222	1·5372	0·8873	0·6505	1·1270	69·17	39·93
55 00	7069	62982	7343	1·5372	0·8837	0·6505	1·1316	69·17	39·77
55 10	7109	44924	7464	1·5373	0·8800	0·6505	1·1363	69·18	39·60
55 20	7150	26754	7585	1·5373	0·8763	0·6505	1·1411	69·18	39·44
55 30	7190	9·9408470	7705	1·5373	0·8727	0·6505	1·1459	69·18	39·27
55 40	7230	9·9390072	7825	1·5374	0·8690	0·6505	1·1508	69·18	39·10
55 50	7270	71557	7945	1·5374	0·8653	0·6504	1·1557	69·18	38·94
56 00	7310	52927	8065	1·5375	0·8616	0·6504	1·1607	69·19	38·77
56 10	7349	34177	8184	1·5375	0·8579	0·6504	1·1657	69·19	38·60
56 20	7389	9·9315310	8304	1·5376	0·8541	0·6504	1·1708	69·19	38·44
56 40	7429	9·9296324	8422	1·5376	0·8504	0·6504	1·1759	69·19	38·27
56 40	7468	77218	8541	1·5376	0·8467	0·6503	1·1811	69·19	38·10
56 50	7508	57987	8659	1·5377	0·8429	0·6503	1·1863	69·20	37·93
57 00	7547	38635	8777	1·5377	0·8392	0·6503	1·1916	69·20	37·76
57 10	7586	9·9219158	8894	1·5378	0·8354	0·6503	1·1970	60·20	37·59
57 20	7625	9·9199557	9012	1·5378	0·8317	0·6503	1·2024	69·20	37·43
57 30	7664	79829	9128	1·5378	0·8279	0·6503	1·2079	69·20	37·26
57 40	7703	59974	9245	1·5379	0·8241	0·6502	1·2134	69·20	37·09
57 50	7742	39991	9361	1·5379	0·8203	0·6502	1·2190	69·21	36·92
58 00	7780	9·9119877	9477	1·5380	0·8166	0·6502	1·2247	69·21	36·75
58 10	7819	9·9099633	9593	1·5380	0·8128	0·6502	1·2304	69·21	36·57
58 20	7858	79257	9709	1·5381	0·8090	0·6502	1·2362	69·21	36·40
58 30	7896	58747	9824	1·5381	0·8051	0·6502	1·2420	69·21	36·23
58 40	7934	38102	0·1869938	1·5381	0·8013	0·6501	1·2479	69·22	36·06
58 50	7972	17321	0·1870052	1·5382	0·7975	0·6501	1·2539	69·22	35·89
59 00	8010	9·8996403	0167	1·5382	0·7937	0·6501	1·2600	69·22	35·72
59 10	8048	75347	0280	1·5383	0·7898	0·6501	1·2661	69·22	35·54
59 20	8086	54150	0393	1·5383	0·7860	0·6501	1·2723	69·22	35·37
59 30	8123	32812	0506	1·5383	0·7821	0·6501	1·2786	69·23	35·20
59 40	8161	9·8911331	0619	1·5384	0·7783	0·6500	1·2849	69·23	35·02
59 50	8198	9·8889706	0731	1·5384	0·7744	0·6500	1·2913	69·23	34·85
60 00	8236	67936	0843	1·5385	0·7705	0·6500	1·2978	69·23	34·67
60 10	8273	46018	0955	1·5385	0·7667	0·6500	1·3044	69·23	34·50
60 20	8310	23952	1066	1·5385	0·7628	0·6500	1·3110	69·23	34·32
60 30	8347	9·8801735	1176	1·5386	0·7589	0·6500	1·3177	69·24	34·15
60 40	8384	9·8779367	1287	1·5386	0·7550	0·6499	1·3245	69·24	33·97
60 50	8420	56845	1397	1·5386	0·7511	0·6499	1·3314	69·24	33·80
61 00	8457	34169	1506	1·5387	0·7472	0·6499	1·3384	69·24	33·62
61 10	8493	9·8711336	1615	1·5387	0·7432	0·6499	1·3454	69·24	33·45
61 20	8529	9·8688345	1724	1·5388	0·7393	0·6499	1·3526	69·24	33·27
61 30	8565	65194	1832	1·5388	0·7354	0·6499	1·3598	69·25	33·09
61 40	8601	41882	1940	1·5388	0·7315	0·6498	1·3671	69·25	32·92
61 50	8637	9·8618406	2048	1·5389	0·7275	0·6498	1·3745	69·25	32·74
62 00	8673	9·8594766	2155	1·5389	0·7236	0·6498	1·3820	69·25	32·56
62 10	8708	70958	2261	1·5390	0·7196	0·6498	1·3896	69·25	32·38



## APPENDIX—TABLES.

TABLE I.—Radii of Curvature of Meridians and Parallels, &c.—*Concluded.*

Latitude.	log N sin 1".	log P sin 1".	log R sin 1".	Chains in 1".		Seconds in one Chain.		English Miles in a Degree.	
				Lati- tude.	Long- itude.	Lati- tude.	Long- itude.	Lati- tude.	Long- itude.
°						"	"		
62 20	0.1878744	9.8546982	0.1872368	1.5390	0.7156	0.6498	1.3973	69.25	32.20
62 30	8779	9.8522835	2474	1.5390	0.7117	0.6498	1.4051	69.26	32.03
62 40	8814	9.8498516	2579	1.5391	0.7077	0.6497	1.4130	69.26	31.85
62 50	8849	74022	2684	1.5391	0.7037	0.6497	1.4210	69.26	31.67
63 00	8884	49352	2789	1.5391	0.6997	0.6497	1.4291	69.26	31.49
63 10	8919	9.8424503	2893	1.5392	0.6957	0.6497	1.4373	69.26	31.31
63 20	8954	9.8399475	2997	1.5392	0.6917	0.6497	1.4456	69.26	31.13
63 30	8988	74262	3099	1.5393	0.6877	0.6497	1.4540	69.27	30.95
63 40	9022	48866	3202	1.5393	0.6837	0.6497	1.4626	69.27	30.77
63 50	9056	9.8323288	3305	1.5393	0.6797	0.6496	1.4712	69.27	30.59
64 00	9090	9.8297512	3407	1.5394	0.6757	0.6496	1.4800	69.27	30.41
64 10	9124	71546	3508	1.5394	0.6717	0.6496	1.4888	69.27	30.23
64 20	9158	45389	3609	1.5394	0.6676	0.6496	1.4978	69.27	30.04
64 30	9191	9.8219035	3709	1.5395	0.6636	0.6496	1.5069	69.28	29.86
64 40	9224	9.8192482	2809	1.5395	0.6596	0.6496	1.5162	69.28	29.68
64 50	9258	65730	3909	1.5395	0.6555	0.6495	1.5256	69.28	29.50
65 00	9291	38774	4008	1.5396	0.6514	0.6495	1.5351	69.28	29.32
65 10	9323	9.8111610	4106	1.5396	0.6474	0.6495	1.5447	69.28	29.13
65 20	9356	9.8084240	4205	1.5396	0.6433	0.6495	1.5544	69.28	28.95
65 30	9389	56659	4302	1.5397	0.6392	0.6495	1.5644	69.29	28.77
65 40	9421	28862	4399	1.5397	0.6352	0.6495	1.5744	69.29	28.58
65 50	9453	9.8000850	4496	1.5397	0.6311	0.6494	1.5846	69.29	28.40
66 00	9485	9.7972618	4592	1.5398	0.6270	0.6494	1.5949	69.29	28.21
66 10	9517	44164	4688	1.5398	0.6229	0.6494	1.6054	69.29	28.03
66 20	9549	9.7915485	4783	1.5398	0.6188	0.6494	1.6160	69.29	27.85
66 30	9580	9.7886577	4877	1.5399	0.6147	0.6494	1.6268	69.29	27.66
66 40	9612	57439	4972	1.5399	0.6106	0.6494	1.6378	69.30	27.48
66 50	9643	9.7828065	5065	1.5399	0.6065	0.6494	1.6489	69.30	27.29
67 00	9674	9.7798454	5158	1.5400	0.6023	0.6494	1.6602	69.30	27.11
67 10	9705	68602	5250	1.5400	9.5982	0.6493	1.6716	69.30	26.92
67 20	9735	38506	5342	1.5400	0.5941	0.6493	1.6833	69.30	26.73
67 30	9766	9.7708163	5434	1.5401	0.5900	0.6493	1.6951	69.30	26.55
67 40	9796	9.7677568	5525	1.5401	0.5858	0.6493	1.7070	69.31	26.36
67 50	9826	46718	5615	1.5401	0.5817	0.6493	1.7192	69.31	26.17
68 00	9856	9.7615610	5705	1.5402	0.5775	0.6493	1.7316	69.31	25.99
68 10	9886	9.7584241	5795	1.5402	0.5734	0.6493	1.7441	69.31	25.80
68 20	9916	52605	5883	4.5402	0.5692	0.6492	1.7569	69.31	25.61
68 30	9945	9.7520699	5972	1.5403	0.5650	0.6492	1.7698	69.31	25.43
68 40	0.1879974	9.7488520	6059	1.5403	0.5609	0.6492	1.7830	69.31	25.24
68 50	0.1880004	56064	6147	1.5403	0.5567	0.6492	1.7964	69.31	25.05
69 00	0032	9.7423324	6233	1.5404	0.5525	0.6492	1.8100	69.32	24.86
69 10	0061	9.7390298	6319	1.5404	0.5483	0.6492	1.8238	69.32	24.67
69 20	0090	56983	6405	1.5404	0.5441	0.6492	1.8378	69.32	24.49
69 30	0118	9.7323371	6490	1.5405	0.5399	0.6492	1.8521	69.32	24.30
69 40	0146	9.7289460	6574	1.5405	0.5357	0.6491	1.8666	69.32	24.11
69 50	0174	55244	6658	1.5405	0.5315	0.6491	1.8814	69.32	23.92
70 00	0202	9.7220719	6741	1.5405	0.5273	0.6491	1.8964	69.32	23.73

TABLE II.

CORRECTIONS to be applied to the logarithms of R sin 1" and N sin 1" in Table I. for Clarke's later values of the dimensions of the earth.

Latitude.	d (log R sin 1").	d (log N sin 1").	Latitude.	d (log R sin 1").	d (log N sin 1").
°			°		
42.....	-0·0000021	+0·0000063	56.....	+0·0000034	+0·0000081
43.....	17	64	57.....	37	82
44.....	13	66	58.....	41	84
45.....	09	67	59.....	45	85
46.....	05	68	60.....	48	86
47.....	-0·0000001	70	61.....	51	87
48.....	+0·0000003	71	62.....	55	88
49.....	07	72	63.....	58	89
50.....	11	74	64.....	61	90
51.....	15	75	65.....	64	91
52.....	19	76	66.....	67	93
53.....	23	77	67.....	70	93
54.....	26	79	68.....	73	94
55.....	30	80	69.....	76	95
			70.....	78	96

TABLE III.

LATITUDES, &c., of Base and Correction Lines. 1st and 2nd Systems of Surveys.

No. of Town-ship.	Number of Line.	Latitude.	Log. N sin 1".	Log. P sin 1".	Log. R sin 1".	Longitude covered by 489 Chains of westing.
		° ' "				" "
0	1st Base . . . . .	49 00 00·00	0·1875572	0·0045001	0·1862852	8 03·959
2	Correction.....	10 36·86	5618	0·0029573	2989	05·681
4	2nd Base . . . . .	21 13·70	5662	0·0014047	3122	07·421
6	Correction.....	31 50·52	5707	9·9998425	3256	09·177
8	3rd Base.....	42 27·33	5751	9·9982704	3391	10 951
10	3rd Correction.....	49 53 04·12	0·1875797	9·9966886	0·1863527	8 12·743
12	4th Base.....	50 03 40·89	5842	9·9950968	3662	14·552
14	Correction.....	14 17·64	5887	9·9334951	3797	16·379
16	5th Base.....	24 54·37	5932	9·9918831	3931	18·225
18	Correction.....	35 31·08	5976	9·9902611	4064	20·089
20	6th Base.....	50 46 07·77	0·1876021	9·9886289	0·1864198	8 21·972
22	Correction.....	56 44·44	6065	9·9869863	4331	23·875
24	7th Base.....	51 07 21·09	6110	9·9853334	4466	25·796
26	Correction.....	17 57·72	6154	9·9836700	4599	27·737
28	8th Base.....	28 34·33	6199	9·9819961	4733	29·698
30	8th Correction.....	51 39 10·92	0·1876243	9·9803116	0·1864867	8 31·678
32	9th Base.....	49 47·49	6287	9·9786163	4998	33·680
34	Correction.....	52 00 24·04	6332	9·9769104	5131	35·701
36	10th Base.....	11 00·57	6376	9·9751934	5264	37·744
38	Correction.....	21 37·08	6420	9·9734657	5395	39·808
40	11th Base.....	52 32 13·57	0·1876464	9·9717267	0·1865529	8 41·894
42	Correction.....	42 50·04	6508	9·9699768	5661	44·001
44	12th Base.....	53 26·49	6552	9·9682156	5791	46·130
46	Correction.....	53 04 02·92	6595	9·9664429	5920	48·282
48	13th Base.....	14 39·33	6640	9·9646592	6055	50·456

TABLE IV.  
LATITUDES, &c., of Base and Correction Lines.  
(Third System of Survey.)

Number of Township.	Name of Line.	Latitude.	Log. N sin 1".	Log. P sin 1".	Log. R sin 1".	Longitude covered by 486 Chains.
		° ' "				° ' "
0	1st Base .....	49 00 00·00	0·1875572	0·0045001	0·1862852	8 00·990
2	Correction .....	10 29·05	5617	0·0029764	2987	02·681
4	2nd Base .....	20 58·07	5661	0·0014431	3119	04·388
6	Correction .....	31 27·08	5705	9·9999003	3251	06·112
8	3rd Base .....	41 56·08	5749	9·9983480	3383	07·852
10	3rd Correction .....	52 25·05	5794	9·9967861	3518	09·610
12	4th Base .....	50 02 54·01	5838	9·9952143	3650	11·385
14	Correction .....	13 22·96	5883	9·9936329	3786	13·178
16	5th Base .....	23 51·88	5927	9·9920418	3918	14·988
18	Correction .....	34 20·77	5971	9·9904407	4050	16·816
20	6th Base .....	44 49·65	6015	9·9888297	4182	18·662
22	Correction .....	55 18·51	6059	9·9872086	4314	20·527
24	7th Base .....	51 05 47·35	6103	9·9855774	4446	22·411
26	Correction .....	16 16·17	6147	0·9839365	4578	24·313
28	8th Base .....	26 44·98	6191	9·9822842	4710	26·235
30	8th Correction .....	37 13·76	6235	9·9806224	4842	28·176
32	9th Base .....	47 42·53	6279	9·9789500	4974	30·136
34	Correction .....	58 11·26	6322	9·9772671	5103	32·117
36	10th Base .....	52 08 39·98	6366	9·9755737	5235	34·118
38	Correction .....	19 08·69	6409	9·9738694	5364	36·139
40	11th Base .....	29 37·37	6453	9·9721545	5496	38·181
42	Correction .....	40 06·04	6497	8·9704288	5628	40·245
44	12th Base .....	50 34·69	6540	9·9686921	5757	42·329
46	Correction .....	53 01 03·31	6582	9·9669442	5883	44·436
48	13th Base .....	11 31·92	6626	9·9651805	6015	46·564
50	13th Correction .....	22 00·52	6670	9·9634156	6147	48·714
52	14th Base .....	32 29·09	6712	9·9616342	6273	50·887
54	Correction .....	42 57·65	6756	9·9598417	6405	53·083
56	15th Base .....	53 26·19	6799	9·9580375	6534	55·302
58	Correction .....	54 03 54·71	6841	9·9562218	6660	57·545
60	16th Base .....	14 23·21	6884	9·9543945	6789	8 59·811
62	Correction .....	24 51·69	6927	9·9525554	6918	9 02·102
64	17th Base .....	35 20·15	6969	9·9507044	7044	04·417
66	Correction .....	45 48·59	7012	9·9488415	7173	06·758
68	18th Base .....	56 17·01	7054	9·9469665	7298	09·123
70	18th Correction .....	55 06 45·42	7096	9·9450792	7424	11·515
72	19th Base .....	17 13·82	7139	9·9431798	7553	13·932
74	Correction .....	27 42·20	7181	9·9412680	7679	16·376
76	20th Base .....	38 10·55	7223	9·9393437	7805	18·847
78	Correction .....	48 38·89	7264	9·9374066	7928	21·345
80	21st Base .....	59 07·20	7305	9·9354569	8051	23·871
82	Correction .....	56 09 35·49	7347	9·9334945	8177	26·494
84	22nd Base .....	20 03·77	7390	9·9315192	8306	29·006
86	Correction .....	30 32·03	7431	9·9295307	8429	31·618
88	23rd Base .....	41 00·28	7472	9·9275290	8552	34·258
90	23rd Correction .....	51 28·51	7513	9·9255140	8675	36·929
92	24th Base .....	57 01 56·70	7554	9·9234856	8798	39·630
94	Correction .....	12 24·89	7595	9·9214436	8921	42·362
96	25th Base .....	22 53·07	7637	9·9193880	9047	45·125
98	Correction .....	33 21·22	7678	9·9173186	9170	47·919
100	26th Base .....	43 49·36	7718	9·9152351	9290	50·747
102	Correction .....	54 17·48	7759	9·9131376	9413	53·607
104	27th Base .....	58 04 45·57	7799	9·9110259	9533	56·500



TABLE IV—*Concluded.*  
LATITUDE, &c., of Base and Correction Lines—*Concluded.*  
(Third System of Survey.)

Number of Township.	Name of Line.	Latitude.	Log. N sin 1".	Log. P sin 1".	Log. R sin 1".	Longitude covered by 486 Chains.
		° ' "				" "
106	Correction.....	58 15 13·66	0·1877839	9·9088998	0·1869653	9 59·427
108	28th Base .....	25 41·73	7879	9·9067591	9773	10 02·389
110	28th Correction.....	36 09·78	7919	9·9046039	0·1869893	05·386
112	29th Base .....	46 37·81	7959	9·9024339	0·1870013	08·418
114	Correction.....	57 05·83	7999	9·9002490	0133	11·487
116	30th Base .....	59 07 33·83	8039	9·8980490	0253	14·593
118	Correction....	18 01·81	8078	9·8958337	0370	17·735
120	31st Base....	28 29·77	8117	9·8936029	0487	20·917
122	Correction..	38 57·71	8157	9·8913568	0607	24·136
124	32nd Base.....	49 25·64	8196	9·8890948	0724	27·396
126	Correction.....	59 53·55	0·1878235	9·8868170	0·1870840	10 30·695

TABLE V.  
CHORD AZIMUTHS, Deflections, Deflection Offsets, &c., for Base Lines.  
(First and Second Systems of Survey.)

Number of Base Line.	Chord Azimuth.	Chord Azimuth.	Deflection.	Deflection.	Deflection Offset for 1 Chain Distance.	Longitude covered by 1 Range.	Number of Township.
	° ' "	°	' "	°	Inches.	s.	
1	89 56 57·4	89·9493	6 05·2	0·1014	1·402	32·3	0
2	55·1	·9486	09·8	·1027	1·420	32·5	4
3	52·8	·9480	14·5	·1040	1·438	32·7	8
4	50·4	·9473	19·2	·1053	1·456	33·0	12
5	48·0	·9467	24·0	·1067	1·474	33·2	16
6	89 56 45·6	89·9460	6 28·8	0·1080	1·493	33·5	20
7	43·1	·9453	33·8	·1094	1·512	33·7	24
8	40·6	·9446	38·8	·1108	1·531	34·0	28
9	38·1	·9439	43·8	·1122	1·551	34·2	32
10	35·5	·9432	49·0	·1136	1·570	34·5	36
11	89 56 32·9	89·9425	6 54·3	0·1151	1·591	38·8	40
12	30·2	·9417	59·6	·1165	1·611	35·1	44
13	27·5	·9410	7 05·0	·1180	1·632	35·4	48

TABLE VI.

CHORD AZIMUTHS, Deflections, Deflection Offsets, &amp;c., for Base Lines.

(Third System of Survey.)

Number of Base Line.	Chord Azimuth Sexagesimal.	Chord Azimuth Decimal.	Deflection Sexagesimal	Deflection Decimal.	Deflection Offset for 1 Chain Distance.	Longitude covered by 1 Range.	Number of Township.
	° ' "	°	' "	°	Inches.	s.	
1	89 56 58.5	89.9496	6 03.0	0.1008	1.394	32.1	0
2	56.3	.9490	07.5	.1021	1.411	32.3	4
3	54.0	.9483	12.0	.1033	1.429	32.5	8
4	51.7	.9477	16.6	.1046	1.447	32.8	12
5	49.4	.9471	21.3	.1059	1.465	33.0	16
6	47.0	.9464	26.1	.1072	1.483	33.2	20
7	44.6	.9457	30.9	.1086	1.501	33.5	24
8	42.1	.9450	35.8	.1099	1.520	33.7	28
9	39.6	.9443	40.8	.1113	1.539	34.0	32
10	37.1	.9436	45.9	.1127	1.558	34.3	36
11	34.5	.9429	51.0	.1142	1.578	34.5	40
12	31.9	.9422	56.2	.1156	1.598	34.8	44
13	29.3	.9415	7 01.5	.1171	1.619	35.1	48
14	26.6	.9407	06.9	.1186	1.639	35.4	52
15	23.8	.9399	12.4	.1201	1.660	35.7	56
16	21.0	.9392	18.0	.1217	1.682	36.0	60
17	18.2	.9384	23.7	.1232	1.704	36.3	64
18	15.3	.9376	29.4	.1248	1.726	36.6	68
19	12.4	.9368	35.3	.1265	1.749	36.9	72
20	09.4	.9359	41.3	.1281	1.772	37.3	76
21	06.3	.9351	47.4	.1298	1.795	37.6	80
22	03.2	.9342	53.6	.1316	1.819	37.9	84
23	00.1	.9335	59.8	.1333	1.843	38.3	88
24	89 55 56.9	.9325	8 06.3	.1351	1.867	38.6	92
25	53.6	.9316	12.8	.1369	1.892	39.0	96
26	50.3	.9306	19.5	.1387	1.918	39.4	100
27	46.8	.9297	26.3	.1406	1.944	39.8	104
28	43.4	.9287	33.3	.1426	1.971	40.2	108
29	39.9	.9277	40.3	.1445	2.098	40.6	112
30	36.2	.9267	47.6	.1465	2.026	41.0	116
31	32.6	.9257	54.9	.1486	2.054	41.4	120
32	28.8	.9247	9 02.4	.1507	2.083	41.8	124

TABLE VII.

CHORD AZIMUTHS, Deflections, Deflection Offsets, Jogs, &c., for Correction Lines.  
(First and Second Systems of Survey.)

Number of Cor- rection Line.	Chord Azimuth.	Chord Azimuth.	Deflection.	Deflection.	Deflection Offset for one chain distance.	LENGTH OF ONE RANGE ON CORREC- TION LINE.		Jog.	Convergence or Divergence on half Section.	Number of Township.
						North side of Road.	South side of Road.			
	° ' "	°	' "	°	in inches	chains.	chains.	chains.	links.	
1	89 56 56·9	89·9491	6 06·2	0·1017	1·406	490·751	487·266	3·485	14·5	2
2	54·6	·9485	10·8	·1030	1·424	·773	·244	·529	14·7	6
3	52·3	·9479	15·5	·1043	1·442	·796	·222	·574	14·9	10
4	49·9	·9472	20·2	·1056	1·460	·818	·200	·618	15·1	14
5	47·5	·9465	25·0	·1069	1·478	·841	·177	·664	15·3	18
6	89 56 45·1	89·9459	6 29·8	0·1083	1·497	490·865	487·154	3·711	15·5	22
7	42·7	·9452	34·7	·1096	1·516	·888	·131	·758	15·7	26
8	40·2	·9445	39·7	·1110	1·535	·913	·107	·806	15·9	30
9	37·6	·9438	44·8	·1124	1·554	·937	·083	·854	16·1	34
10	35·0	·9430	50·0	·1139	1·574	·962	·058	·904	16·3	38
11	89 56 32·4	89·9423	6 55·2	0·1153	1·594	490·987	487·034	3·953	16·5	42
12	29·7	·9416	7 00·6	·1168	1·615	491·012	·008	4·004	16·7	46



TABLE VIII.

CHORD AZIMUTAS, Deflections, Deflection Offsets, Jogs, &c., for Correction Lines.  
(Third System of Survey.)

Number of Cor- rection Line.	Chord Azimuth Sexagesimal.	Chord Azimuth Decimal.	Deflection Sexa- gesimal.	De- flection cimal.	Deflection Offset for one chain distance.	LENGTH OF ONE RANGE ON CORREC- TION LINE.		Jogs.	Convergence or Divergence on half section.	Number of Township.
						North side of Road.	South side of Road.			
	° ' "	° ' "	° ' "	° ' "	Inches.	chains.	chains.	chains.	chains.	
1	89 56 57.4	89.9493	7 05.2	0.1014	1.403	487.719	484.297	3.421	0.143	2
2	55.1	.9486	09.8	.1027	1.420	.740	.276	.463	.144	6
3	52.9	.9480	14.3	.1040	1.438	.762	.255	.507	.146	10
4	50.5	.9474	19.0	.1053	1.456	.784	.233	.551	.148	14
5	48.2	.9467	23.7	.1066	1.474	.806	.212	.594	.150	18
6	45.8	.9461	28.5	.1079	1.492	.829	.188	.641	.152	22
7	43.3	.9454	33.4	.1093	1.510	.852	.167	.685	.154	26
8	40.9	.9447	38.3	.1106	1.529	.875	.144	.731	.155	30
9	38.3	.9440	43.4	.1120	1.548	.899	.120	.779	.157	34
10	35.8	.9433	48.4	.1134	1.568	.923	.097	.826	.159	38
11	33.2	.9426	53.6	.1149	1.588	.947	.072	.875	.161	42
12	30.6	.9418	58.8	.1163	1.608	.972	.047	.925	.164	46
13	27.9	.9411	7 04.2	.1178	1.629	487.997	484.024	3.973	.166	50
14	25.2	.9403	09.6	.1193	1.650	488.023	483.998	4.025	.168	54
15	22.4	.9396	15.2	.1209	1.671	.049	.972	.077	.170	58
16	19.6	.9388	20.8	.1224	1.693	.075	.946	.129	.172	62
17	16.7	.9380	26.6	.1241	1.715	.102	.919	.183	.174	66
18	13.8	.9372	32.4	.1257	1.737	.130	.892	.238	.177	70
19	10.9	.9364	38.3	.1273	1.760	.158	.865	.293	.179	74
20	07.8	.9355	44.4	.1290	1.783	.187	.837	.350	.181	78
21	04.8	.9337	50.5	.1307	1.807	.215	.809	.406	.184	82
22	89 56 01.7	.9338	56.7	.1324	1.831	.245	.779	.466	.186	86
23	89 55 58.5	.9329	8 03.0	.1342	1.855	.275	.750	.525	.189	90
24	55.2	.9320	09.6	.1360	1.879	.306	.720	.586	.191	94
25	51.9	.9311	16.2	.1378	1.905	.338	.690	.648	.194	98
26	48.6	.9302	22.9	.1397	1.931	.369	.658	.711	.196	102
27	45.1	.9292	29.8	.1416	1.957	.402	.627	.775	.199	106
28	41.6	.9282	36.8	.1436	1.984	.434	.594	.840	.202	110
29	38.0	.9272	44.0	.1456	2.012	.469	.561	.908	.204	114
30	34.4	.9262	51.2	.1476	2.040	.503	.528	4.975	.207	118
31	30.7	.9252	58.6	.1496	2.068	.538	.493	5.045	.210	122
32	89 55 26.9	89.9241	9 06.2	.1517	2.097	488.574	483.458	5.116	.213	126

TABLE IX.

LATITUDE, with Logarithms of Secant and Tangent for the North Boundary of each Section, and the widths of Quarter Sections on such Boundaries.

(First and Second Systems of Survey.)

Township.	Section.	Latitude $\Phi$ .	Sec $\Phi$ .	Difference for 10 Chains.	Tan $\Phi$ .	Difference for 10 Chains.	Quarter Section.
1	36	49° 0000	0.183 06		0.060 84		40.000
	1	0147	18		0.061 06		39.988
	12	0295	31		29		976
	13	0442	44		51		964
	24	0590	57		74		952
	25	0737	70		97		940
2	36	0885	83		0.062 20		928
	1	1032	96		42		915
	12	1180	0.184 09		64		903
	13	1327	22		87		891
	24	1475	35		0.063 09		879
	25	1622	48		32		867
3	36	1769	61		54		39.855 40.146
	1	1917	74		77		40.134
	12	2064	87		0.064 00		122
	13	2212	99		23		110
	24	2359	0.185 12		45		097
	25	2507	25		68		085
4	36	2654	38		90		073
	1	2802	51		0.065 13		061
	12	2949	64		35		048
	13	3097	78		58		036
	24	3244	90		81		024
	25	3391	0.186 03		0.066 04		012
5	36	3538	16	0.000 02	26	0.000 03	40.000
	1	3685	29		49		39.988
	12	3833	42		71		976
	13	3980	55		94		964
	24	4128	69		0.067 16		951
	25	4275	82		39		939
6	36	4422	94		61		927
	1	4569	0.187 07		84		915
	12	4717	21		0.068 07		902
	13	4864	34		29		890
	24	5012	47		52		878
	25	5159	59		74		866
7	36	5307	73		97		39.854 40.148
	1	5454	86		0.069 20		40.136
	12	5602	99		42		124
	13	5749	0.188 12		65		111
	24	5897	26		88		099
	25	6044	38		0.070 11		087
8	36	6191	51		33		074
	1	6338	64		56		062
	12	6486	78		78		050
	13	6633	91		0.071 01		037
	24	6781	0.189 04		24		025
	25	6928	18		46		013
8	36	7076	31		69		40.000

TABLE IX—Continued.  
LATITUDE, with Logarithms of Secant and Tangent, &c.—Continued.

Township.	Section.	Latitude $\Phi$ .	Sec $\Phi$ .	Difference for 10 Chains.	Tan $\Phi$ .	Difference for 10 Chains.	Quarter Section.
9	1	49° 7223	0 189 44	0 000 02	0 071 91	0 000 03	39 988
	12	7371	57		0 072 14		976
	13	7518	70		37		963
	24	7666	83		60		951
	25	7813	96		82		939
	36	7960	0 190 09		0 073 05		926
10	1	8107	23		27		914
	12	8255	36		50		902
	13	8402	49		72		889
	24	8550	62		95		877
	25	8697	76		0 074 19		865
	36	8845	89		41		39 852 40 150
11	1	8992	0 191 02		64		40 138
	12	9140	16		86		125
	13	9287	29		0 075 09		113
	24	9435	42		32		100
	25	9582	55		54		088
	36	9729	69		77		075
12	1	49 9876	82		99		40 063
	12	50 0024	95		0 076 23		050
	13	0171	0 192 08		45		038
	24	0319	22		68		025
	25	0466	35		91		013
	36	0614	49		0 077 13		40 000
13	1	0761	62		36		39 988
	12	0908	76		58		975
	13	1056	89		81		963
	23	1203	0 193 02		0 078 03		950
	25	1351	16		27		938
	36	1498	29		50		925
14	1	1645	42		72		913
	12	1793	55		95		900
	13	1940	69		0 079 17		888
	24	2087	83		40		875
	25	2235	96		63		863
	36	2382	0 194 09		85		39 850 40 152
15	1	2530	23		0 080 08		40 139
	12	2677	36		31		127
	13	2824	49		54		114
	24	2972	63		77		101
	25	3119	77		99		089
	36	3266	90		0 081 22		076
16	1	3414	0 195 03		45		063
	12	3561	17		67		051
	13	3709	31		90		038
	24	3856	44		0 082 13		025
	25	4003	57		36		013
	36	4151	71		59		40 000
17	1	4298	85		81		39 987
	12	4446	98		0 083 04		975
	13	4593	0 196 11		27		962
	24	4741	25		50		949
	25	4888	39		72		937
	36	5035	52		95		924



TABLE IX—*Continued.*  
 LATITUDE, with Logarithms of Secant and Tangent, &c.—*Continued.*

Township.	Section.	Latitude $\Phi$ .	Sec $\Phi$ .	Difference for 10 Chains.	Tan $\Phi$ .	Difference for 10 Chains.	Quarter Section.
18	1	50° 5182	0.196 66		0.084 17		39.911
	12	5330	80		40		899
	13	5477	93		63		886
	24	5625	0.197 06		86		873
	25	5772	20		0.085 09		861
	36	5920	34		32		39.848 40.153
19	1	6067	47		54		40.140
	12	6214	61		77		128
	13	6362	75		0.086 00		115
	24	6509	88		22		102
	25	6656	0.198 02		45		089
	36	6804	15		68		077
20	1	6951	29		91		064
	12	7098	43		0.087 14		051
	13	7246	56		37		038
	24	7393	70		60		026
	25	7540	84		82		013
	36	7688	97		0.088 05		40.000
21	1	7835	0.199 11		28		39.987
	12	7983	25		50		974
	13	8130	39		73		961
	24	8278	52		96		949
	25	8425	65		0.089 19		936
	36	8572	79		42		923
22	1	8719	93	0.000 02	65	0.000 03	910
	12	8867	0.200 07		88		898
	13	9014	21		0.090 10		885
	24	9162	35		33		872
	25	9309	48		56		859
	36	9457	62		79		39.846 40.155
23	1	9604	75		0.091 02		40.142
	12	9751	89		25		129
	13	9899	0.201 03		48		116
	24	51.0046	17		70		103
	25	0193	31		93		090
	36	0341	45		0.092 16		073
24	1	0488	59		39		065
	12	0635	72		62		052
	13	0783	86		84		039
	24	0930	0.202 00		0.093 07		026
	25	1077	14		30		013
	36	1225	28		53		40.000
25	1	1372	42		76		39.987
	12	1520	56		99		974
	13	1667	69		0.094 22		961
	24	1815	83		44		948
	25	1962	97		67		935
	36	2109	0.203 11		90		922
26	1	2256	25		0.095 13		909
	12	2404	39		36		896
	13	2551	53		59		883
	24	2699	67		82		870
	25	2846	81		0.096 04		857
	36	2994	95		28		39.844 40.157

TABLE IX—Continued.  
LATITUDE, with Logarithms of Secant and Tangent, &c.—Continued.

Township.	Section.	Latitude $\Phi$	Sec $\Phi$ .	Difference for 10 Chains.	Tan $\Phi$ .	Difference for 10 Chains.	Quarter Section.
27	1	51° 3141	0·204 09	0·000 02	0·096 51	0·000 03	40·144
	12	3288	23		73		131
	13	3436	36		96		118
	24	3583	50		0·097 19		105
	25	3730	64		42		092
	36	3878	78		65		078
28	1	4025	92		88		065
	12	4172	0·205 06		0·098 11		052
	13	4320	20		34		039
	24	4467	34		57		026
	25	4614	48		79		013
	36	4762	62		0·099 02		40·000
29	1	4909	76		25		39·987
	12	5056	90		48		974
	13	5204	0·206 04		71		961
	24	5351	19		94		947
	25	5498	33		0·100 17		934
	36	5646	47		40		921
30	1	5793	61		63		908
	12	5940	75		86		894
	13	6088	89		0·101 09		881
	24	6235	0·207 03		32		868
	25	6382	17		54		855
	36	51·6530	0·207 31		0·101 78		39·842
41	36	52·6255	0·216 79		0·116 99		39·918
42	1	6402	94		0·117 22		904
	12	6549	0·217 09		45		891
	13	6697	24		69		877
	24	6844	38		92		863
	25	6991	53		0·118 15		850
	36	7139	68		38		39·836
43	1	7286	82		61	{	152
	12	7433	96		84		138
	13	7581	0·218 11		0·119 08		124
	24	7728	26		30		111
	25	7875	40		54		097
	36	8023	55		77		083
44	1	8170	70		0·129 00		069
	12	8317	85		24		056
	13	8465	0·219 00		46		042
	24	8612	14		70		028
	25	8759	29		93		014
	36	8907	44		0·121 16		40·000
45	1	9054	58	0·000 02	40	0·000 03	39·986
	12	9201	73		62		972
	13	9349	88		86		958
	24	9496	0·220 03		0·122 09		945
	25	9643	18		32		931
	36	9791	33		56		917
46	1	9938	48		79		903
	12	53·0085	63		0·123 02		890
	13	0233	77		25		876
	24	0380	92		49		862

TABLE IX—*Concluded.*LATITUDE, with Logarithms of Secant and Tangent, &c.—*Concluded.*

Township.	Section.	Latitude $\Phi$ .	Sec $\Phi$ .	Difference for 10 Chains.	Tan $\Phi$ .	Difference for 10 Chains.	Quarter Section.
47	25	53° 0527	0 221 07		0 123 71		848
	36	0675	21		95		39 834
							40 168
	1	0822	36				
	12	0969	51		0 124 19		40 154
	13	1117	66		41		140
	24	1264	81		65		126
48	25	1411	96		88		112
	36	1559	0 222 11		0 125 12		098
					34		084
	1	1706	26		58		070
	12	1853	41		81		056
	13	2001	56		0 126 04		042
	24	2148	71		28		028
	25	2295	86		51		014
	36	2443	0 223 00		74		40 000

TABLE X.

LATITUDE, with Logarithms of Secant and Tangent for the north boundary of each Section, and width of Quarter Sections on such boundaries.

(Third System of Survey.)

Township.	Section.	Latitude $\Phi$ .	Sec $\Phi$ .	Difference for 10 Chains.	Tan $\Phi$ .	Difference for 10 Chains.	Quarter Section.
1	36	49° 0000	0 183 06		0 060 84		40 000
	1	0147	19		0 061 06		39 988
	12	0291	31		28		976
	13	0438	44		51		964
	24	0582	57		73		953
	25	0729	69		95		941
	36	0874	82		0 062 17		929
2	1	1020	95		40		917
	12	1165	0 184 08		62		905
	13	1311	20		85		893
	24	1456	33		0 063 07		882
	25	1603	46		29		870
	36	1747	59		51		39 858
							40 143
3	1	1894	71		74		131
	12	2039	84		96		119
	13	2185	97		0 064 18		107
	24	2330	0 185 10		41		095
	25	2476	23		63		084
	36	2621	35		85		072
4	1	2768	48		0 065 08		060
	12	2912	61		30		048



TABLE X—*Continued.*LATITUDE, with Logarithms of Secant and Tangent for each Section, and width of Quarter Sections—*Continued.*

Township.	Section.	Latitude $\Phi$ .	Sec $\Phi$ .	Difference for 10 Chains.	Tan $\phi$ .	Difference for 10 Chains.	Quarter Section.
	13	49° 3059	0·185 74		0·065 52		40·036
	24	3203	87		74		024
	25	3350	0·186 00		97		012
	36	3495	12		0·066 19		000
5	1	3641	25		42		39·988
	12	3786	38		64		976
	13	3932	51		86		964
	24	4077	64		0·067 08		952
	25	4224	77		31		940
	36	4368	90		53		928
6	1	4515	0·187 03		76		916
	12	4659	15		98		904
	13	4806	28		0·068 20		892
	24	4951	41		43		880
	25	5097	54		65		868
	36	5242	67		87		39·858 40·145
7	1	5388	80		0·069 10		133
	12	5533	93		32		121
	13	5680	0·188 06		54		109
	24	5824	19		77		097
	25	5971	32		99		085
	36	6115	45		0·070 21		073
8	1	6262	58	0·000 02	44	0·000 03	060
	12	6407	71		66		048
	13	6553	84		89		036
	24	6698	97		0·071 11		024
	25	6844	0·189 10		33		012
	36	6989	23		56		000
9	1	7136	36		78		39·988
	12	7280	49		0·072 00		976
	13	7427	62		23		964
	24	7571	75		45		951
	25	7718	88		68		939
	36	7863	0·190 01		90		927
10	1	8009	14		0·073 12		915
	12	8154	27		35		903
	13	8300	40		57		891
	24	8445	53		79		879
	25	8592	66		0·074 02		867
	36	8736	79		24		39·855 40·147
11	1	8883	93		47		135
	12	9027	0·191 06		69		122
	13	9174	19		92		110
	24	9319	32		0·075 14		098
	25	9465	45		36		086
	36	9610	58		59		073
12	1	9756	71		81		061
	12	9901	84		0·076 03		050
	13	50° 0047	88		26		037
	24	0192	0·192 11		48		024

TABLE X—*Continued.*LATITUDE, with Logarithms of Secant and Tangent for each Section, and width of Quarter Sections—*Continued.*

Township.	Section.	Latitude $\Phi$ .	Sec $\Phi$ .	Difference for 10 Chains.	Tan $\Phi$ .	Difference for 10 Chains.	Quarter Section.
13	25	50° 0339	0 192 24	0 000 02	0 076 71	0 000 03	40 012
	36	0483	37		93		000
	1	0630	50		0 077 16		39 988
	12	0775	63		38		975
	13	0921	77		60		963
	24	1066	90		83		951
14	25	1212	0 193 03		0 078 05		939
	36	1357	16		28		926
	1	1503	29		50		914
	12	1648	43		72		902
	13	1795	56		95		890
	24	1939	69		0 079 17		877
15	25	2086	82		40		865
	36	2230	96		62		{ 39 853
	1	2377	0 194 09		85		{ 40 149
	12	2522	22		0 080 07		137
	13	2668	35		30		124
	24	2813	49		52		112
16	25	2959	62		75		099
	36	3104	75		97		087
	1	3250	89		0 081 20		074
	12	3395	0 195 02		42		062
	13	3542	15		64		050
	24	3686	28		87		037
17	25	3833	42		0 082 09		025
	36	3977	55		32		012
	1	4124	69		54		000
	12	4269	82		77		39 988
	13	4415	95		99		975
	24	4560	0 196 09		0 083 22		963
18	25	4706	22		44		950
	36	4851	35		67		940
	1	4997	49		89		925
	12	5142	62		0 084 12		913
	13	5289	76		34		901
	24	5433	89		56		888
19	25	5580	0 197 02		79		876
	36	5724	16		0 085 01		863
	1	5871	29		24		{ 39 851
	12	6016	43		46		{ 40 150
	13	6162	56		69		138
	24	6307	69		91		125
20	25	6453	83		0 086 14		113
	36	6598	96		36		100
	1	6744	0 198 10		59		088
	12	6889	23		81		075
	13	7035	37		0 087 04		063
	24	7180	50		27		050
21	25	7327	64		49		038
	36	7471	77		72		025
	1	7618	91		94		013
	12	7762	0 199 04		0 088 17		000
							39 987
							975

TABLE X—Continued.  
LATITUDE, with Logarithms of Secant and Tangent for each Section and width of Quarter Sections—Continued.

Township.	Section.	Latitude $\Phi$ .	Sec $\Phi$ .	Difference for 10 Chains.	Tan $\Phi$ .	Difference for 10 Chains.	Quarter- Section.
	13	50° 7909	0 199 18		0 088 39		39 962
	24	8054	31		62		950
	25	8200	45		84		937
	36	8345	58		0 089 07		925
22	1	8491	72	0 000 02	29	0 000 03	912
	12	8636	85		52		899
	13	8782	99		74		887
	24	8927	0 200 13		97		874
	25	9073	26		0 090 20		862
	36	9218	40		42		{ 39 849
							{ 40 152
23	1	9365	53		65		140
	12	9509	67		87		127
	13	9656	81		0 091 10		114
	24	9800	94		32		102
	25	9747	0 201 08		55		089
	36	51° 0091	21		77		076
24	1	0238	35		0 092 00		064
	12	0383	49		22		051
	13	0529	63		45		038
	24	0674	76		68		025
	25	0820	90		90		013
	36	0965	0 202 03		0 093 13		000
25	1	1111	17		35		39 987
	12	1256	31		58		975
	13	1402	44		81		962
	24	1547	58		0 094 03		949
	25	1694	72		26		936
	36	1838	58		48		924
26	1	1985	99		71		911
	12	2129	0 203 13		93		898
	13	2276	27		0 095 16		885
	24	2420	40		39		873
	25	2567	54		61		860
	36	2712	68		84		{ 39 847
							{ 40 154
27	1	2858	82	0 000 02	0 096 07	0 000 03	141
	12	3003	95		29		129
	13	3149	0 204 09		52		116
	24	3294	23		74		103
	36	3440	37		97		090
	36	3585	51		0 097 19		077
28	1	3731	64		42		064
	12	3876	78		65		051
	13	4023	92		87		039
	24	4167	0 205 06		0 098 10		026
	25	4314	20		33		013
	36	4458	33		55		000
29	1	4605	47		78		39 987
	12	4749	61		0 099 00		974
	13	4896	75		29		962
	24	5040	89		46		949
	25	5187	0 206 03		69		936
	36	5332	17		91		923



TABLE X—*Continued.*LATITUDE, with Logarithms of Secant and Tangent for each Section, and width of Quarter Sections—*Continued.*

Township.	Section.	Latitude $\Phi$ .	Sec $\Phi$ .	Difference for 10 Chains.	Tan $\Phi$ .	Difference for 10 Chains.	Quarter Section.
30	1	51° 5478	0·206 31	0·000 02	0·100 14	0·000 03	910
	12	5263	44		36		897
	13	5769	58		59		884
	24	5914	72		82		39·871
	25	6060	86		0·101 05		858
	36	6205	0·207 00		27		{ 39·846 40·156
31	1	6351	14		50		143
	12	6496	28		72		130
	13	6642	42		95		117
	24	6787	56		0·102 18		104
	25	6934	70		41		091
	36	7078	84		63		078
32	1	7225	99		86		065
	12	7369	0·208 12		0·103 08		052
	13	7516	26		31		039
	24	7660	40		54		026
	25	7807	54		77		013
	36	7951	68		99		000
33	1	8098	82		0·104 22		39·987
	12	8243	96		45		974
	13	8389	0·209 10		68		961
	24	8534	24		90		948
	25	8680	38		0·105 13		935
	36	8825	52		35		922
34	1	8971	66		58		909
	12	9116	80		81		896
	13	9262	94		0·106 04		883
	24	9407	0·210 08		26		869
	25	9553	22		49		856
	36	9698	36		72		{ 39·843 40·158
35	1	9844	51		95		145
	12	9989	65		0·107 17		132
	13	52° 0135	79		40		119
	24	0280	93		63		106
	25	0427	0·211 07		86		092
	36	0571	21		0·108 08		079
36	1	0718	36		31		066
	12	0862	50		54		053
	13	1009	64		77		040
	24	1153	78		99		026
	25	1300	92		0·109 22		013
	36	1444	0·212 06		45		000
37	1	1591	21		68		39·987
	12	1735	35		90		974
	13	1882	49		0·110 13		960
	24	2027	63		36		947
	25	2173	77		59		934
	36	2318	92		81		921
38	1	2464	0·213 06		0·111 04		907
	12	2609	20		27		894
	13	2755	34		50		881
	24	2900	49		73		868

TABLE X—*Continued.*LATITUDE, with Logarithms of Secant and Tangent for each Section, and width of Quarter Sections—*Continued.*

Township.	Section.	Latitude $\Phi$ .	Sec $\Phi$ .	Difference for 10 Chains.	Tan $\Phi$ .	Difference for 10 Chains.	Quarter Section.
	25	52° 30' 46	0·213 63		0·211 96		855
	36	3191	77		0·112 18		{ 39·841 40·160
39	1	3337	92	0·000 02	41	0·000 03	147
	12	3482	0·214 06		64		134
	13	3628	20		87		120
	24	3773	34		0·113 09		107
	25	3919	49		32		093
	36	4064	63		55		080
40	1	4210	77		78		067
	12	4355	92		0·114 01		053
	13	4501	0·215 06		24		040
	24	4646	20		46		027
	25	4794	35		69		013
	36	4937	49		92		000
41	1	5084	64		0·115 15		39·987
	12	5228	78		38		973
	13	5375	92		61		960
	24	5519	0·216 07		83		946
	25	5666	21		0·116 06		933
	36	5810	35		29		920
42	1	5957	50		52		906
	12	6101	64		75		893
	13	6248	79		98		879
	24	6392	93		0·117 21		866
	25	6539	0·217 08		44		853
	36	6683	22		66		{ 39·839 40·162
43	1	6830	37		89		149
	12	6974	51		0·118 12		135
	13	7121	66		35		122
	24	7266	80		58		108
	25	7412	95		81		095
	36	7557	0·218 09		0·119 04		081
44	1	7703	24		27		068
	12	7848	38		49		054
	13	7994	53		73		041
	24	8139	67		95		027
	25	8285	82		0·120 18		014
	36	8430	96		41		000
45	1	8576	0·219 11	0·000 02	64	0·000 03	39·986
	12	8721	25		87		973
	13	8867	40		0·121 10		950
	24	9012	55		33		946
	25	9158	69		56		932
	36	9303	84		79		919
46	1	9449	98		0·122 02		905
	12	9594	0·220 13		25		891
	13	9740	28		48		878
	24	9885	42		70		864
	25	53° 00' 31	57		93		851
	36	0176	71		0·123 16		{ 39·837 40·164

TABLE X—*Continued.*LATITUDE, with Logarithms of Secant and Tangent for each Section, and width of Quarter Sections—*Continued.*

Township.	Section.	Latitude $\Phi$ .	Sec $\Phi$ .	Difference for 10 Chains.	Tan $\Phi$ .	Difference for 10 Chains.	Quarter Section.
47	1	53° 0321	0 220 86		0 123 39		40 151
	12	0467	0 221 01		62		137
	13	0612	15		85		123
	24	0758	30		0 124 08		110
	25	0903	45		31		096
	36	1049	59		54		082
48	1	1195	74		77		068
	12	1340	89		0 125 00		055
	13	1486	0 222 04		23		041
	24	1631	18		46		027
	25	1777	33		69		014
	36	1922	48		92		000
49	1	2068	63		0 126 15		39 986
	12	2213	77		38		972
	13	2359	92		61		958
	24	2504	0 223 07		84		945
	25	2650	22		0 127 07		931
	36	2795	36		30		917
50	1	2941	51		53		903
	12	3086	66		76		889
	13	3233	81		99		875
	24	3377	96		0 128 22		861
	25	3524	0 224 10		45		848
	36	3668	25		68	0 000 03	39 834 40 166
51	1	3815	40	0 000 02	91		153
	12	3959	55		0 129 14		139
	13	4106	70		37		125
	24	4250	85		60		111
	25	4397	0 225 00		83		097
	36	4541	14		0 130 06		083
52	1	4688	29		30		069
	12	4832	44		53		055
	13	4979	59		76		042
	24	5123	74		99		028
	25	5270	89		0 131 23		014
	36	5414	0 226 04		45		000
53	1	5561	19		68		39 986
	12	5705	34		91		972
	13	5852	49		0 132 14		958
	24	5996	63		37		944
	25	6143	79		60		930
	36	6287	93		83		917
54	1	6434	0 227 08		0 133 07		903
	12	6578	23		30		890
	13	6725	38		53		875
	24	6869	53		76		861
	25	7016	68		99		847
	36	7160	83		0 134 22		39 833 40 169
55	1	7307	99		45		155
	12	7451	0 228 13		68		140
	13	7598	29		91		126
	24	7742	44		0 135 14		112



TABLE X—Continued.

LATITUDE, with Logarithms of Secant and Tangent for each Section, and width of Quarter Sections—Continued.

Township.	Section	Latitude $\Phi$ .	Sec $\Phi$ .	Difference for 10 Chains.	Tan $\Phi$ .	Difference for 10 Chains.	Quarter Section.
56	25	53° 7889	0 228 59	0 000 02	0 135 38	0 000 03	40 098
	36	8033	74		61		084
	1	8180	89		84		070
	12	8324	0 229 04		0 136 07		056
	13	8471	19		30		042
	24	8615	34		53		028
57	25	8762	49		77		014
	36	8906	64		0 137 00		000
	1	9052	79		23		39 986
	12	9197	95		46		972
	13	9343	0 230 10		69		958
	24	9488	25		92		944
58	25	9634	40		0 138 16		930
	36	9779	55		39		915
	1	9925	70		62		901
	12	54° 0070	85		85		887
	13	0216	0 231 01		0 139 08		873
	24	0361	16		31		859
59	25	0507	31		55		845
	36	0652	46		78		{ 39 831
	1	0798	62		0 140 01		40 171
	12	0943	77		24		157
	13	1089	92		48		142
	24	1234	0 232 07		71		128
60	25	1380	23		94		114
	36	1525	38		0 141 17		100
	1	1671	53		41		085
	12	1816	68		64		071
	13	1962	84		87		057
	24	2107	99		0 142 10		043
61	25	2253	0 233 14		34		028
	36	2398	29		57		014
	1	2544	45		80		000
	12	2689	60		0 143 03		39 986
	13	2835	76		27		971
	24	2980	91		50		957
62	25	3126	0 234 06		73		943
	36	3271	21		96		929
	1	3417	37		0 144 20		914
	12	3562	52		43		900
	13	3708	68		66		886
	24	3853	83		89		872
63	25	3999	98		0 145 13		857
	36	4144	0 235 14		36		843
	1	4290	29		59		{ 39 829
	12	4435	45		83		40 173
	13	4581	60		0 146 06		159
	24	4725	75		29		144
64	25	4872	91		53		130
	36	5016	0 236 06		76		115
	1	5163	22		99		101
	12	5307	37		0 147 22		086
							072
							058

TABLE X—*Continued.*LATITUDE, with Logarithms of Secant and Tangent for each Section, and width of Quarter Sections—*Continued.*

Township.	Section.	Latitude $\Phi$ .	Sec $\Phi$ .	Difference for 10 Chains.	Tan $\Phi$ .	Difference for 10 Chains.	Quarter Section.
	13	54° 5454	0·236 53		0·147 46		40·043
	24	5598	68		69		029
	25	5745	84		93		014
	36	5889	99		0·148 16		000
65	1	6036	0·237 15		39		986
	12	6180	30		63		971
	13	6327	46		86		957
	24	6471	61		0·149 09		942
	25	6618	77		33		928
	36	6762	92		56		913
66	1	6909	0·238 08		80		899
	12	7053	24		0·150 03		884
	13	7199	39		26		870
	24	7344	55		50		855
	25	7490	70		73		841
	36	7635	86		96		{ 39·827 40·175
67	1	7781	0·239 02		0·151 20		161
	12	7926	17		43		146
	13	8072	33		67		131
	24	8217	49		90		117
	25	8363	64		0·152 13		102
	36	8508	80		37		088
68	1	8654	96		60		073
	12	8799	0·240 11	0·000 02	84	0·000 03	058
	13	8945	27		0·153 07		044
	24	9090	43		31		029
	25	9236	58		54		015
	36	9381	74		77		000
69	1	9527	90		0·154 01		39·985
	12	9672	0·241 05		24		971
	13	9818	21		48		956
	24	9962	37		71		941
	25	55° 0109	53		95		927
	36	0253	68		0·155 18		912
70	1	0400	84		42		898
	12	0544	0·242 00		65		883
	13	0691	16		89		868
	24	0835	31		0·156 12		854
	25	0982	47		36		839
	36	1126	63		59		{ 39·824 40·177
71	1	1274	79		83		163
	12	1417	95		0·157 06		148
	13	1563	0·243 11		30		133
	24	1708	26		53		118
	25	1854	42		77		104
	36	1999	58		0·158 00		089
72	1	2145	74		24		40·074
	12	2290	90		47		059
	13	2436	0·244 06		71		044
	24	2581	22		94		030
	25	2727	38		0·159 18		015
	36	2872	53		41		000

TABLE X—Continued.

LATITUDE, with Logarithms of Secant and Tangent for each Section, and width of Quarter Sections—Continued.

Township.	Section.	Latitude $\Phi$ .	Sec $\Phi$ .	Difference for 10 Chains.	Tan $\Phi$ .	Difference for 10 Chains.	Quarter Section.
73	1	55° 3018	0 244 69		0 159 65		39 985
	12	3163	85		89		970
	13	3309	0 245 01		0 160 12		956
	24	3454	17		36		941
	25	3600	33		59		926
	36	3744	49		83		911
74	1	3891	65		0 161 07		896
	12	4035	81		30		881
	13	4182	97		54		867
	24	4326	0 246 13		77		852
	25	4473	29		0 162 01		837
	36	4617	45		24		{ 39 822 40 180
75	1	4764	61		48		165
	12	4908	77		72		150
	13	5054	93		95		135
	24	5199	0 247 09		0 163 19		120
	25	5345	25		43		105
	36	5490	41		66		090
76	1	5636	57		90		075
	12	5781	73		0 164 13		060
	13	5927	90		37		045
	24	6072	0 248 06		61		030
	25	6218	22		85		015
	36	6363	38		0 165 08		000
77	1	6509	54	0 000 02	32	0 000 03	39 985
	12	6654	70		55		970
	13	6800	86		79		955
	24	6944	0 249 02		0 166 03		940
	25	7091	19		27		925
	36	7235	35		50		910
78	1	7382	51		74		895
	12	7526	67		98		880
	13	7672	83		0 167 21		865
	24	7817	0 250 00		45		850
	25	7963	16		69		835
	36	8108	32		92		{ 39 820 40 182
79	1	8254	48		0 168 16		167
	12	8399	64		40		152
	13	8545	81		64		137
	24	8690	97		87		122
	25	8836	0 251 13		0 169 11		106
	36	8981	30		35		091
80	1	9127	46		59		076
	12	9272	62		82		061
	13	9418	79		0 170 06		046
	24	9562	95		30		030
	25	9709	0 252 11		54		015
	36	9853	27		77		000
81	1	56° 0000	44		0 171 01		39 985
	12	0144	60		25		970
	13	0291	77		49		954
	24	0435	93		72		939



TABLE X—*Concluded.*

LATITUDE, with Logarithms of Secant and Tangent for each Section, and width of Quarter Sections—*Concluded.*

Township.	Section.	Latitude $\Phi$ .	Sec $\Phi$ .	Difference for 10 Chains.	Tan $\Phi$ .	Difference for 10 Chains.	Quarter Section.
82	25	56° 0581	0 253 09		0 171 96		39 924
	36	0726	26		0 172 20		909
	1	0872	42		44		893
	12	1017	58		68		878
	13	1163	75		92		863
	24	1308	91		0 173 15		848
	25	1454	0 254 08		39		833
	36	1599	24		63		39 817
							40 185

TABLE XI.

To Convert Chains into Decimals of a Township Side.

Chains.	Equivalent Decimal of a Township Side.			Chains.	Equivalent Decimal of a Township Side.		
	Side = 489 $\epsilon$ .	Side = 486 $\epsilon$ .	Side = 483 $\epsilon$ .		Side = 489 $\epsilon$ .	Side = 486 $\epsilon$ .	Side = 483 $\epsilon$ .
1	0 00204	0 00206	0 00207	30	0 06135	0 06173	0 06211
2	00409	00412	00414	40	08180	08230	08282
3	00613	00617	00621	50	10225	10288	10352
4	00818	00823	00828	60	12270	12346	12422
5	01022	01029	01035	70	14315	14403	14493
6	01227	01235	01242	80	16360	16461	16563
7	01431	01440	01449	90	18405	18519	18634
8	01636	01646	01656	100	20450	20576	20704
9	01840	01852	01863	200	40900	41152	41408
10	02045	02058	02070	300	61350	61728	62112
20	04090	04115	04141	400	81800	82305	82816

TABLE XII.

CORRECTIONS to be applied to the tabular quantities in Table No. VII when the north side of the road allowance on Correction Lines is run instead of the south ; also correction to road allowance on account of curvature.

Number of Cor- rection Line.	Correction to Chord Azimuth	Correction to Deflection Off- set (for one chain distance).	Correction to width of road allowance on account of curvature.									
			jog = 30 chs.	jog = 40 chs.	jog = 50 chs.	jog = 60 chs.	jog = 70 chs.	jog = 80 chs.	jog = 90 chs.	jog = 100 chs.	jog = 110 chs.	jog = 120 chs.
	"	inches.	lks.	lks.	lks.	lks.	lks.	lks.	lks.	lks.	lks.	lks.
1st. . . . .	-1 3	+0 010	2 5	3 2	3 9	4 6	5 2	5 8	6 4	7 0	7 5	7 9
11th . . . . .	-1 7	+0 013	2 8	3 7	4 5	5 2	6 0	6 7	7 3	7 9	8 5	8 9
21st . . . . .	-2 2	+0 017	3 2	4 2	5 2	6 0	6 9	7 7	8 4	9 1	9 8	10 4
31st . . . . .	-2 9	+0 022	3 7	4 8	5 9	6 9	7 9	8 8	9 6	10 4	11 2	11 9

TABLE XIII.

SHOWING the difference of Latitude between Township Corners and Section and Quarter Section Posts on a Township Chord.

Number of Line.	d $\phi$ For $\frac{1}{2}$ sec. from Corner.	d $\phi$ For 1 sec. from Corner.	d $\phi$ For $1\frac{1}{2}$ sec. from Corner.	d $\phi$ For 2 secs. from Corner.	d $\phi$ For $2\frac{1}{2}$ secs. from Corner.	d $\phi$ For 3 secs. from Corner.
	"	"	"	"	"	"
1st Base . . . . .	0 02 lks.	0 04 lks.	0 05 lks.	0 06 lks.	0 07 lks.	0 07 lks.
do . . . . .	3 2 "	5 9 "	8 0 "	9 5 "	10 3 "	10 8 "
11th Base . . . . .	0 02 lks.	0 04 lks.	0 06 lks.	0 07 lks.	0 08 lks.	0 08 lks.
do . . . . .	3 6 "	6 7 "	9 1 "	10 8 "	11 8 "	12 1 "
21st Base . . . . .	0 03 lks.	0 05 lks.	0 07 lks.	0 08 lks.	0 09 lks.	0 09 lks.
do . . . . .	4 2 "	7 7 "	10 3 "	12 3 "	13 3 "	13 8 "
31st Base . . . . .	0 03 lks.	0 06 lks.	0 08 lks.	0 09 lks.	0 10 lks.	0 11 lks.
do . . . . .	4 8 "	8 8 "	12 0 "	14 4 "	15 6 "	16 2 "





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SUMMARY REPORT

GEOLOGICAL SURVEY DEPARTMENT

FOR THE YEAR

1891

*PRINTED BY ORDER OF PARLIAMENT*

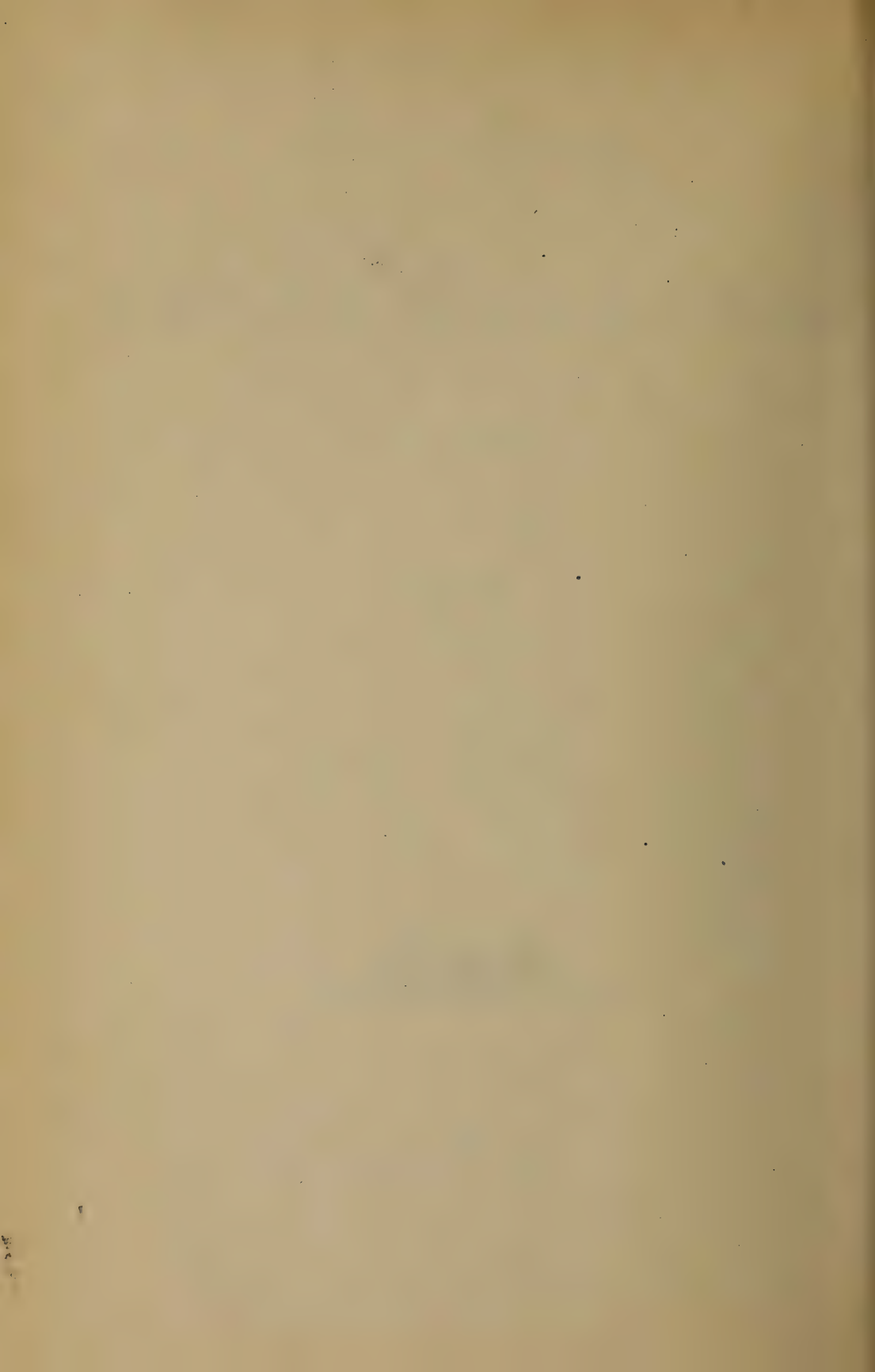


OTTAWA:

PRINTED BY S. E. DAWSON, PRINTER TO THE QUEEN'S MOST  
EXCELLENT MAJESTY.

1892.

[No. 13a—1891.] *Price, 5 cents.*



*To His Excellency the Right Honourable Lord STANLEY OF PRESTON, Governor  
General of Canada, &c., &c., &c.*

MAY IT PLEASE YOUR EXCELLENCY :

The undersigned has the honour to lay before Your Excellency, in compliance with 53 Vic., Chap. II, Section 6, the Summary Report of the Proceedings of the Geological Survey Department for the year ending 31st December, 1891.

Respectfully submitted,

E. DEWDNEY,  
*Minister of the Interior.*

OTTAWA, 1st January, 1892.





## GEOLOGICAL SURVEY DEPARTMENT,

OTTAWA, December, 1891.

The Hon. EDGAR DEWDNEY,

Minister of the Interior.

SIR,—In presenting the summary report of the proceedings and work of the Department, as required by section 6 of the Act 53 Victoria, chap. XI, it is gratifying to be able to again record the substantial and satisfactory progress that has been achieved during the year now closed, and it is even more so, to be able to ascribe it largely to the increasing interest in the work, evinced by the members of the staff, as shown by the painstaking perseverance with which they are devoting their best energies to investigating, often under very adverse circumstances, depicting and describing the diverse and often intricate geological phenomena presented throughout the Dominion, and more especially in endeavouring to decipher what the bearing of these phenomena is and what they teach, in reference to the profitable development of the mines and mining industries of the country. Thus one or other of the members of the field staff of the Department is in a position to give intending investors and the public the most reliable, authentic and entirely disinterested information respecting mines and minerals in all parts of Canada. Notwithstanding these facts, however, we find that in most cases the opinion of some so-called, often self-styled “mining expert” or “practical miner” from Europe or the United States, is sought and acted upon in preference to that of a member of the geological corps, who is thoroughly acquainted with the geological structure of the district in which the information is desired. These “expert” and “practical” opinions rarely prove correct, and their first cost, often considerable, is by no means the greatest. Not a year passes unmarked by such cases and the past season is no exception. The boring for gas at Stewarton in 1889; for water at Morden in 1890; for gas at Belleville in 1891; and for oil near Pincher Creek the past summer, are some of the instances of such useless expenditures, all of which might have been saved had the advice of the Department been sought and followed, instead of that of “expert” opinion.

In this connection and as showing the proper functions, not generally understood, of a geological survey and an associated museum, I may be permitted to quote the following remarks from “Science,” No. 464, December, 1891:—

“A geological survey, if properly organized, is composed of professional men of scientific attainments and of undoubted integrity; it is an official organization, and its examinations are made disinterestedly, and on the truthfulness of its results depends the reputation of its members. Its publications are widely circulated; they are designed to be used by the professional man and also by the layman; being official, and coming from such a disinterested source, the results are accepted generally without hesitation by the capitalists or manufacturers. Such influence and acceptance could never be reached by reports emanating from owners of property or other interested parties, nor would the judgment of such concerning theories of distribution or quality command respect unless emanating from well-known expert sources; thus the capital and enterprise necessary for the inception of such undertakings would be slow to follow such guidance. Hence, a good geological survey constitutes the best of advertising mediums, if you choose to call it such; advertising what is genuine and good, but never stooping to indiscriminate booming.

“But another means of disseminating information exists, over and above that of publications. Some people are not reached by reports, either because they are not given much to reading, or for lack of access to the publications. They may come to the state, or even be in the state, knowing little or nothing of its natural features and products. In such cases, a State Museum is the most effective means of conveying information; a museum which shall contain not only specimens of materials, but maps, models, views, diagrams and reports concerning all that is of interest in this connection; the materials in which shall be so arranged as to convey clear ideas, not only of what is in the state,

but where it is, how it occurs, and how much there is of it; which shall be supplemented by the presence of trained men, familiar with the state, who can guide the stranger in the right direction.

"In conclusion, I would say a few words concerning the educating influences of a geological survey among the citizens of the area in which it operates. Through its publications, through the intercourse with its members, and in other ways, a vast amount of information is absorbed by the people concerning the land they live in and its products. This information they apply unconsciously in their various operations. It prevents them from being led into hopeless enterprises, it leads them to discountenance extravagant expectations and to recognize charlatanry, it brings them to appreciate the truly useful and valuable, and it supplies them with a source of advice which many are otherwise destitute of."

The foregoing description of the proper functions, educating influences and general usefulness of such an institution, is worthy of the attention and careful consideration of the public and especially of those in whose hands it rests to find the means for its establishment and support.

The early part of the year was as usual fully occupied by the members of the survey in the preparation of maps and reports and in the critical examination and classification of the numerous specimens—rocks, minerals, fossils, plants and insects—collected in the field. In the divisions of lithology, paleontology, botany and entomology valuable, gratuitous assistance has been rendered the survey by the following United States and European scientists :—

Professor G. H. Williams, of Baltimore, O.  
 Professor Cope, of Philadelphia, Pa.  
 Mr. S. H. Scudder, of Cambridge, Mass.  
 Professor T. Rupert Jones, London, England.  
 Professor H. Alleyne Nicholson, Aberdeen, Scotland.  
 Dr. N. C. Kindberg, Sweden.  
 Dr. Carl Müller, Germany.  
 Mr. C. Warnstorf, Germany.  
 Mr. C. Lyman, of Montreal.

To all of these gentlemen the best thanks of the Geological Survey of Canada are due and I have much pleasure in thus officially tendering the same.

Mr. James Fletcher has also added to his already onerous duties in connection with the experimental farm, the honorary curatorship of the entomological collection in the museum of the Geological Survey, and has devoted no little time to its arrangement and care.

In my last summary report, page 7, I referred to the annual report Vol. IV and mentioned seven of the parts then issued. The volume has since been issued. It contains ten separate reports, which with illustrations and maps, table of contents and index, constitutes a work of some 1082 pages R. 8vo. The detailed reports which will form Vol. V of the annual reports are well advanced and the volume will probably be issued before the close of the present year.

As in previous years the geological investigations were carried on in all the provinces of the Dominion, either in the direction of revising and adding to the details of portions of districts that had already been examined and reported on, or in exploring and mapping districts in which no detail had hitherto been secured.

The working parties, 20 in number, were distributed as follows :—

British Columbia.....	1	Quebec .....	5
Alberta .....	1	New Brunswick.....	1
Manitoba .....	2	Nova Scotia.....	3
Ontario .....	7		

In addition to these, explorations were made by Professor Macoun and by Messrs. Ami, Weston and Willimott for collecting in Botany and Zoology, Paleontology and Mineralogy.

From the summary statements herewith presented, it will be seen that Professors Bailey, Adams and Laffamme were only a short time in the field, during vacation, and



Mr. McConnell only during the month of June, while nearly the whole of Dr. G. M. Dawson's time had to be devoted to work in connection with the Behring Sea Commission.

A large part of my own time during the year has, as usual, been occupied in editing reports, in correspondence and in attending to the executive details of the Department, including those of the Survey and the Museum.

On the 11th of March I received a communication from Mr. Beauchemin, of St. Hyacinthe, informing me of the discovery of natural gas in that vicinity. On page 34A of my summary report for 1887, referring to this subject, I wrote: "While for reasons connected with this—the geological structure—I have never had any faith in their occurrence on the north side of the St. Lawrence, I consider that the probability of such reservoirs existing on the south side, in the country between Lake St. Peter and St. Hyacinthe, is very great."

In reply to Mr. Beauchemin's letter, I communicated the above to him, and that I would take an early opportunity to visit the locality. I was unable, however, to do so till the 7th of July, when I proceeded to St. Hyacinthe, and accompanied by Mr. Beauchemin and Mr. Desaulier, I visited the several sites where gas was reported. The first examined was on the farm of Antoine Laplante, about six miles north of St. Hyacinthe, on the concession St. Amable, two miles south-west of the village of St. Barnabé, and the same distance west of the Richelieu river. Here Laplante had recently, with the aid of a small hand-boring tool, succeeded in reaching the rock at a depth of 90 feet, a continuous, though not large, flow of gas being the result. The material penetrated consisted entirely of clay, with some small stones near the bottom. This boulder clay covers and almost entirely conceals the older rocks, and forms the level surface of the great plain of the Richelieu and Yamaska rivers. A pipe  $1\frac{1}{2}$  inch diameter had been inserted in the hole, and a continuous, though not powerful, flow of gas was coming from it. On inquiry, I found that within a radius of 400 yards from this well, there were four places, sites of old wells, where gas is escaping. One of these was sunk 45 years ago, and the gas has been escaping ever since. The others are more or less recent trials for water, and have penetrated to rock through from 85 to 100 feet of clay, and in all gas comes from the bottom. In three, an inch and a-half pipe has been inserted, and the escaping gas ignites readily and burns steadily, but the pressure is light. On lot No. 18, parish of St. Hyacinthe, range St. Francis, on the farm of Emile Lorquet, close on the east side of the railway to Farnham, I also found gas escaping in a similar manner from a small pit sunk about two feet into the black soil. Near this two wells had been sunk, one 150 yards east, 106 feet deep, the other about 500 yards north, 110 feet deep, and in both, I was informed, gas had been encountered at the bottom. The sinking was through clay, like that in the bore holes on the St. Amable concession, which lies about eleven miles nearly due north, and on the other, or west, side of the Yamaska river.

These facts, in connection with what I wrote in my summary report for 1887, above referred to, are certainly interesting, but by no means sufficient to warrant any positive assertion respecting the success or otherwise of an attempt to find extensive gas or oil reservoirs in the Trenton or other Cambro-Silurian formations, which underlie the great plain of the Richelieu and Yamaska rivers, between Sorel and St. Hyacinthe. There are no surface indications in the area which would indicate any particular site as the most favourable. Under these circumstances the vicinity of, or on, the St. Amable concession is the locality I would suggest as that where a trial should be made. If successful, the cost of piping the gas to St. Hyacinthe would be a trifle in comparison with its value for heating and lighting purposes.

On Friday, the 10th of April, I left Montreal for Deloraine, Manitoba, to make arrangements with the contractor there, to continue the boring. On arriving at Deloraine, on the 17th of April, I found the boring had attained the depth of 1,740 feet, without any material change in the character of the strata from that stated page 9 of my summary report for 1890.

After discussing the situation with the local boring committee and the contractor it was arranged to continue the work. Various unexpected and unavoidable delays and difficulties have, however, since arisen, notwithstanding every effort on the part of the contractor, so that on the 31st of December a depth of only 1,808 feet had been reached. There is, however, still every reason to believe that a successful result will be attained so soon as the base of the impermeable clay shales is reached.

Since the date of my last report the expenditure has been \$6,846.18, making a total to 31st December, 1891, of \$15,494.80.

The undertaking is of national importance and should certainly be prosecuted in spite of the unfortunate accidents and delays that have occurred, until either a negative or affirmative result is attained.

I left Deloraine on the 20th of April, the 22nd was spent at Schreiber in an examination of the cuttings, in the forenoon, four miles west, and in the afternoon, two miles and a half east, and to the openings lately made on a deposit of pyrrhotite precisely like those of Sudbury and occurring on the border of a mass of diabase, associated, as at Sudbury, with schists breccias and some white granite rock, this latter being well seen near both ends of the first trestle east of Schreiber. The analysis of the samples of the ore that were collected gave only .003 per cent of nickel, but as in all these deposits the nickel is very unevenly distributed an analysis of a few small samples is of little value as an index of the contents of the whole body. At the date of my visit the snow was still thick in the woods, and I was not able to do more than ascertain that the area over which the pyrrhotite occurred was more than sufficient to constitute a good mine, and was very favourably situated for working. The deposit was, I believe, opened by Messrs. Marks, of Port Arthur, towards the close of 1890. I cannot learn that any work has been done on it since the date of my visit in April last.

The northern limit of the area of Huronian rocks, which extends from about four miles west of Schreiber, eastward, for about sixty or seventy miles, has not yet been traced out, nor has that other large area crossed by the Canadian Pacific railway between White River and Dalton stations.

It is important that this should be done so as to be able to indicate those portions of it which should be carefully explored for valuable economic minerals. With a view to comparing the rocks of these areas with those of Sudbury, I devoted several days, from the 5th to the 11th of September, to an examination of the cuttings on the line of the railway from east of the Pic River bridge to near Schreiber. Much of it is occupied by massive gabbro, diabase and red quartz syenite, and it is in and around the borders of these crystalline rocks, especially the former, that the nickeliferous deposits should be looked for. The fine samples of zinc ore that were exhibited at the Colonial and Indian Exhibition in 1886, were derived from one of these diorite masses which lies about twelve miles north, a little east, from Rossport station, and which may be connected with the Schreiber Huronian area.

On the 13th of July I left Ottawa for Pincher Creek, Southern Alberta, and arrived there on the 19th *via* Lethbridge and Macleod. My object was to visit and examine the reported discoveries of petroleum in that vicinity and in the South Kootenay pass, as well as the coal seams discovered in the Crow's Nest pass. The petroleum discovery was incorrectly referred to on page 13 of my last summary report as being in the Crow's Nest pass, and it was stated that circumstances had then prevented me from carrying out my intention of visiting the locality. On the present occasion all necessary arrangements had been made for men and horses to meet me at Pincher Creek, and these arrived there from the west the same afternoon.

I found considerable excitement existed in the village, in fact, a decided "boom" in petroleum claims, and that a company had been formed to put down a boring, the site selected for the experiment being on sec. 21, township 3, range 29, some 18 miles south, a little east, of Pincher Creek village.

On Monday the 20th of July I proceeded to the locality named, accompanied by several gentlemen interested in the work. The country traversed is fine farming land, a richly grassed undulating prairie well watered by numerous small tributaries of Pincher creek



and the Waterton river, all of which eventually find their way to the Saskatchewan. The site of the proposed boring was on a small flat on the left bank of one of the tributaries of Waterton river. A gang of men were at work erecting a derrick and preparing to put an engine and boiler, already on the ground, in place.

The evening of the 20th of July and the whole of the following day was devoted to an examination of the rocks that were exposed in the creek both below and above the site selected for boring. They were ordinary varieties of sandstone and sandy shales of the Cretaceous, with irregular dips from  $15^{\circ}$  to  $20^{\circ}$ . The last exposure of these rocks up the creek, was about three miles and a quarter, then, for about three miles further there were no exposures up to where the creek emerges from a rocky gorge, all along which there are good exposures of hard flinty red, green and grey shales and sandstones often gritty and quartzose and dipping to south-south-west at  $25^{\circ}$  to  $30^{\circ}$ . These are the Cambrian rocks which here form the base of the eastern spurs and ridges of the Rocky mountains. It was stated that both in this gorge and at several places in pools on the prairie to the eastward petroleum had been seen, but no one at the boring camp could show me any of these places.

The whole country for many miles around and up into the entrance of the South Kootenay pass, nine miles to the south, was marked off with the stakes of the oil claims. On inquiry, I was informed that an "expert" named Baring had been there and had expressed a favourable opinion as to boring where operations were being commenced. I was unable to learn any other reason for fixing on the site. The note I made under date 21st of July reads: "There is nothing whatever to indicate the existence of petroleum in this vicinity. It seems highly improbable that it should be found here, though, of course, not impossible." I subsequently heard that a copious flow of water had been struck and the boring abandoned. The cost of this very absurd and useless operation must have been considerable.

On the 22nd of July, I left the boring camp and proceeded about eight miles in a southerly direction, gradually approaching the foot of the mountains, till we struck the Kootenay branch of the Waterton river, which here leaves the South Kootenay or Boundary pass. This stream was then followed up about two miles and a-half, where we camped on the left bank, opposite a depression in the high range which here borders the pass on its southern side, and divides the waters of the Kootenay branch from those of "Cameron Falls" creek. An ascent of about two miles by a somewhat rough trail mostly over grey and white heavy bedded dolomites brought us to the summit of this depression. We then descended into the valley of Cameron Falls creek. This creek takes its rise in a small lake near Camp Akamina of the boundary survey and flows north-east about seven miles to where we struck it, and where it makes an almost right angle bend and flows south-east into Waterton lake.

Camp Akamina is thus described by Dr. G. M. Dawson: "The spot known as Camp Akamina, the eastern terminal station of the old North-West boundary commission, is situated at the head of the valley just described. It has an elevation of about 6,000 feet above the sea, and is a sheltered hollow characterized by thick spruce woods of fine growth. The boundary cairn is placed on the watershed about a mile from the camp, and though built thirteen years ago was found in perfect preservation. It is important as marking not only the forty-ninth parallel or boundary between British North America and the United States, but as lying at the adjacent angles of British Columbia and the as yet unorganized North-West Territory."\*

A full description is also given in the same chapter of the character of the rocks and the appearance of the country.

Cameron Falls brook is a rapid mountain stream, eight or ten yards wide. After following it up about a mile and a-half on the left bank, Mr. Fernie, my guide, remarked that we must be close to where the oil had been found. He had scarcely spoken when, while still in the saddle and on the trail eight or nine feet above the brook, I noticed a powerful odour of petroleum. Descending to the edge of the water and stirring the stones and gravel in the bed of the stream, considerable quantities of oil at once rose to the surface and floated away. Crossing to the right bank it was again seen coming out of the

\*Report on the Geology and Resources of the region in the vicinity of the Forty-ninth Parallel, Chap. III.



bank, some inches above the then level of the stream. Here, skinning it off the surface of a shallow pool, a wine bottle full was soon collected. This can now be seen in the Geological Survey Museum. Sixty or seventy yards below where the oil was seen, a rocky reef of grey siliceous dolomite crosses the creek and rises into a steep bluff on the left bank: on the right bank, seven or eight feet above the creek, a broad thickly timbered flat extends for 150 yards to the base of the bordering mountains which culminate six miles to the south-west at the boundary monument, 6,000 feet above sea level.

No work whatever had been done to test the nature of the oil sources. A comparatively small outlay for some shallow sinking or boring on the flat above described would do this.

On the 23rd, we proceeded through the pass, crossing the summit and camping on Akamina brook about six miles down on the western slope in British Columbia. On the 24th we proceeded down the valley and at about four miles north of the 49th parallel the trail came down to the level of the brook, and here on the edge of a beaver dam pool there were ledges of hard dark blue shale dipping E.  $30^{\circ}$  N.  $12^{\circ}$ . Lifting layers of this at and below the water a quantity of dark green circular patches of oil rose to the surface, and a precisely similar result followed by stirring up the mud in the bottom of the pool. This place is about fifteen miles in a direct line, west  $10^{\circ}$  south, from the occurrence on Cameron Falls creek, the main watershed of the Rocky Mountains and Mounts Kirby, Spence, and Yarrell intervening. Oil is said, by the Indians (the Stoneys) who frequent this region, to occur at other points, in the Akamina Brook valley, both above and below that recorded. The Akamina joins the Flathead river in Montana, about four miles south of the international boundary. The Beaver dam oil is of a dark greenish black and does not apparently differ much from that of Cameron Falls creek. Preliminary tests might be made here by sinking a shallow shaft in the shales at the Beaver dam pool, and by a boring on the sandy and gravelly flat country about two miles and a-half north of the boundary line.

On the 24th of July we camped in Montana on the left bank of the Flathead river, about two miles above the mouth of the Akamina or Kish-e-ne-nah creek.

On the 25th we proceeded up the Flathead valley, the trail passing for the most part along high terraces of sand, clay and gravel. At 8 a.m. we recrossed the boundary on one of these terraces and then again descended to the river where we off saddled and waited for the pack train. It arrived at 10.30; and wethen ascended again to the high level terrace and turning north crossed a number of ridges and gullies into the valley of Sage creek camping on the right bank at about nine miles above its mouth.

At about a mile and a-half higher up, the creek leaves the high mountains which border its upper course in a north-easterly direction up to the main watershed some twelve or fourteen miles distant, and here at the edge of the water, on the left bank, I found hard dark flinty shales like those at the Beaver dam pool on the Akamina dipping S.  $25^{\circ}$ — $30^{\circ}$  W.  $< 25^{\circ}$ . Directly the layers of this rock are raised the oil rises and spreads over the surface of the water in such abundance that a short time suffices with the aid of a tin cup to collect a bottle full. Here, also a considerable quantity of gas escapes from the cracks and joints in the rock and ignites freely on the application of a match.

Less than half a mile higher up, on the right bank and on the opposite or west side of the valley, oil was again found issuing from the base of a bank of drift which has here filled the valley and caused the stream to make a sharp bend eastward to the base of the opposite mountain. No rock was exposed here, but every stone in the bed of the creek, especially on being broken or rubbed, gave out a strong odour of petroleum. The oil collected here, a sample of which can be seen in the museum, differs entirely in appearance from those of Cameron Falls creek and Akamina or Kish-e-ne-nah creek.

Some of it was of a light lemon yellow, but most of it nearly the colour of pale brandy and with a very powerful petroleum odour.

The general geological structure, the character of the rocks and the physical aspect of the country in the South Kootenay, the North Kootenay and the Crow's Nest and other passes of the Rocky mountains have been admirably described by Dr. G. M.

Dawson,\* and the South Kootenay pass is also described in his Report on the Geology and Resources of the Forty-ninth Parallel, 1875. For details on the subjects named these works can be referred to. The present is, however, I believe the first recorded instance of the occurrence of petroleum in this region, as well as of its occurrence in Cambrian rocks. Whether the reference of the rocks to this age is correct, is not quite certain; that it is so as regards the somewhat similar siliceous dolomites and quartzose strata of the Kicking Horse pass has been proved by the discovery of a Cambrian fauna and there seems no reason to doubt that the petroleum-bearing beds of the South Kootenay pass are of the same age. At present, however, except on the traverses made by Dr. Dawson, little or nothing is known respecting the distribution of the formations in the great block of mountainous country which lies between the 49th and 51st parallels of latitude and the 115th and 117th degrees of longitude, and which comprises the Purcell, Hughes, Macdonald and Galton ranges and covers an area of about 9,600 square miles, much of it densely wooded and with peaks ranging to eight and nine thousand feet.

Leaving Sage creek we followed up the Flathead valley crossing and recrossing the river and its numerous channels so frequently that we travelled almost as much in the water as on the land. On Tuesday, the 28th of July, we travelled in this manner for ten hours without a halt, and at 6 p.m. camped on a fine grassy flat, surrounded by timber, at the foot of the abrupt ascent from the Flathead valley to the eastern summit of the North Kootenay pass.†

On the 30th of July, we camped at Lee's lake on the Crow's Nest pass trail. On the 31st Col. Baker joined me here, and on the following day we camped at the east end of Crow's Nest lake, and on the next day, 2nd of August, we reached the coal prospecting camp situated about 1,200 feet above the trail, on the ridge which runs in a north easterly direction between Marten creek and Michel creek and forms the west side of the valley of the west branch of Michel creek. From this ridge a number of spurs with steep intervening gullies descend abruptly to the trail; in these and on the intervening ridges a wonderful series of coal seams is disclosed, one above the other from near the level of the trail to the summit of the ridge.

No exact measurements were taken and it may be that some of the lower cannel seams are the upper ones repeated by faulting. The outcrops which can all be seen on the ground are as follows, twenty seams in all, showing a total thickness of 132 feet of coal:

	Feet.	
No. 1.....	5	} No. 1 to 10 inclusive are cannel coals.
2.....	3	
3.....	4	
4.....	2	
5.....	4	
6.....	3	
7.....	2	
8.....	4	
9.....	5	
10.....	6	
11.....	4	} So named by Col. Baker.
12 (Peter seam).....	15	
13.....	7	
14 (Selwyn seam).....	6	
15 (Jubilee do).....	30	
16 (Williams seam).....	20	
17.....	5	
18.....	3	
19.....	2	
20.....	2	

} These four are cannel coal.

\*Annual Report Geological Survey, 1885.

†Annual Report Geological Survey, 1865, p. 61 *B et seq.*

The number and thickness of these seams in the above table are as supplied me by Mr. Fernie, who has superintended all the exploratory work that has been done on the seams. Between the most eastern outcrops I examined, and the western ones close to the junction of Marten creek and the west branch of Michel creek, is a distance of about two miles along the steep mountain side, to the north of the trail. Within this distance the outcrops were seen of nearly all these seams, either on the ridges or in the sides of the ravines which score the face of the mountain. The few hours I was able to spend on the ground, while not sufficient to enable me to affirm the absolute correctness of the details of the table, were, however, ample to enable me to see that there is in the Crow's Nest pass, between the eastern summit, 4,330 feet above tide, and the valley of Elk river, in British Columbia, an area of not less than 144 square miles, that is destined to be one of the most valuable and most productive coal fields in Canada. A rough calculation would give about 49,952,000 tons per square mile. If one-half of this is available there are in each square mile 24,976,000 tons. The average elevation of the field is about the same as that of Canmore and Banff, or between 4,000 and 5,000 feet. From Pincher Creek westward to Elk river, the pass presents no difficulties for railway construction. The eastern entrance to the pass in Alberta is 3,800 feet, and where it comes out on the Elk river is 3,300 feet; the highest intervening summit being 5,500 feet. A better route to the Elk river, however, than that of the present trail, would be to follow down Michel creek, from near the eastern summit and thus avoid the western and higher summit, and reach Elk river about ten miles above the mouth of Coal creek. The distance through the pass from Lee's lake, Alberta, to the Elk river, is about thirty-seven miles.

On the 4th of August, after devoting the forenoon to a further examination of the Marten creek seams, we proceeded through the pass and reached Elk river at 6 p.m. No coal seams were seen till about four miles above the mouth of Coal creek; here at the mouth of a steep rocky gulley, about 200 yards to the right of the trail, a fine seam of coal, 7 feet thick, had been cut into. The section exposed showed in descending order:

Shale.....	10 feet.
Hard ferruginous band.....	1.
Coal.....	1.6
Shale.....	7.6
Coal.....	7.6

Cherty conglomerate and massive gritty sandstones are seen both above and below; the dip is about E. 10° N. 15°—20°. A close search along the mountain side, between here and the water-shed at the head of Coal creek, would almost certainly disclose the outcrops of many more of the Marten creek seams.

On the 5th of August, we descended the Elk river valley, about seven miles, then turning to the left ascended the mountain, a steep climb of 1,500 feet. Here on top of a broken-down cliff of massive sandstone, about 50 feet thick, we came to the first of a series of coal seams; the dip being E. 20° N. 35° and the seam 25 to 30 feet thick, with a shale parting about 2 feet; bar. 24.93. Ascending 130 feet over shales and brown thick bedded sandstone forming a similar broken-down cliff of about 50 feet, a second seam of coal was reached, also 30 feet thick; bar. 24.80. Above this four more seams were examined:

No. 3.....	15 feet, bar. 24.57
4.....	4 do do 24.50
5.....	7 do do 24.42
6.....	30 do do 24.35



Above No. 6 there are six more seams which were not visited, but the particulars of which given me by Mr. Fernie are as follows :—

No. 7.....	10 feet—100 feet from No. 6
8.....	4 do 100 do 7
9.....	7 do 100 do 8
10.....	2 do 100 do 9
11.....	7 do 100 do 10
12.....	4 do 200 do 11

The distances are approximate only, they have not been measured.

The above gives a total thickness of 148 feet of coal against 132 feet in the Marten creek area on the eastern side of the basin, while in other respects the seams correspond so closely as to make it almost certain that, except where cut out in the valleys, they are continuous beneath the whole intervening area. For much detailed information respecting the Crow's Nest pass the Annual Report of the Geological Survey, Vol. I, part B, 1885, already cited, and the accompanying map, can be referred to.

Many of the seams are first-class coking coals and others are good gas coals, but none of them are anthracites. For analyses of those of the Jubilee and Peter seams, Marten Creek, See Annual Report Geological Survey, Vol. III, Part II, pp. 12 s. to 15 s., and for those of the "cannel" seams, Vol. IV, pp. 7 R. and 8 R.

On the 6th of August I reached Pincher Creek, and Ottawa on the 14th.

Dr. G. M. Dawson was employed during the earlier part of the present year in working up and preparing for publication the information intended to be included in the Kamloops sheet of the geological map of British Columbia and had made preparations to undertake some special examinations in the foot-hills of the Rocky Mountains and to continue the field work already begun in the adjacent Shuswap sheet during the summer. Before leaving for this work, however, he was appointed as one of the British Behring sea commissioners, and arrangements had consequently to be made such as to enable Mr. McEvoy to continue the work on the Shuswap sheet on the general plan already adopted, while Dr. Dawson was left free to devote himself for the time to the special enquiry just referred to. The completion of the Kamloops sheet and report has consequently been unavoidably delayed, but it is hoped that both may be ready in time to form a part of the next annual volume of the Geological Survey.

Mr. James McEvoy left Ottawa on the 20th of June for field work in the interior of British Columbia, and returned on the 6th of November.

He reports as follows on the special work entrusted to him, as above explained :—

The season was chiefly spent in continuing the work within the area of the Shuswap sheet of the geological map. This sheet is referred to in the report of Dr. G. M. Dawson's work in the summary report for 1890. It embraces the country immediately to the east of that covered by the Kamloops sheet and like it is laid out with sides eighty miles in length, thus covering an area of 6,400 square miles.

The first ten days of the season were occupied by a short trip into the northern part of the area covered by the Kamloops sheet to secure some additional information of the country between Loon lake and Deadman river, necessary for the completion of that sheet. While in this vicinity a number of specimens of the hyalite discovered in 1889 were collected.

After the completion of this trip the country between Chapron lake and Okanagan lake was visited. As there were no trails progress was necessarily slow ; two traverses were, however, made across it, besides several shorter ones, and three mountain summits were occupied for topographical sketches. Here, and generally throughout the western and southern portions of the area of the Shuswap sheet, the Tertiary volcanic rocks are more extensively developed than was formerly supposed. At a rough estimate they cover about a-fourth of the whole area of the sheet.

During the season Shuswap, Long, Mabel and Sugar lakes and a part of Okanagan lake were surveyed with a patent floating log and prismatic compass. Observations for latitude were taken with a seven-inch sextant to fix places not otherwise determined.

Neither Mabel nor Sugar lakes had ever been surveyed and were only very roughly indicated on existing maps. They are situated in the foot-hills of the Gold range on the Shuswap river and are about 35 miles apart by the river route. Their shores are rocky, being composed of gneiss and mica-schists of the Shuswap series, with large masses of pegmatite and graphic granite included. At the head of Sugar lake grey granite replaces the gneiss entirely, holding in many places angular fragments of mica-schist.

To the north-east of Enderby, and south of the Canadian Pacific railway, the mountains were ascended and two transit stations were established at an elevation of more than 6,000 feet. These mountains are almost bare of trees, and, where not too rugged, travelling is easy. Bear, caribou and deer are abundant.

Another transit station was made on the mountains north-east of Sugar lake on the eastern boundary of the sheet. These and several compass stations on either side of White valley, together with the points occupied in 1890, will afford sufficient data for the construction of an approximately accurate topographical map.

Southward and easterly from Salmon Arm, along Canoe creek and Deep creek, there is an extensive area of flat land, with grey silty soil, very suitable for farming. Generally this area is lightly timbered, while much of it having been burnt over would be easily cleared for cultivation.

About half way between Lansdowne, on the Shuswap and Okanagan railway, and the first crossing of the Salmon river by the wagon road to Grande Prairie, specimens of garnet were discovered. The crystals are nearly equal in size to the Stikine garnets and are enclosed in a light grey mica-schist and in places form at least half of the rock mass.

Though not included within the area of the Shuswap sheet, it may be mentioned that the numerous discoveries of silver-bearing galena and zinc blende on the North Thompson river at Mosquito Flat and above the Clearwater, are attracting a good deal of attention. These localities are situated about 50 miles and 75 miles respectively from Kamloops. The ores are said to give rich assays.

The following specimens from Mosquito Flat were assayed in the laboratory of this Department:—

1. Zinc blende with a little galena : gold, none ; silver, 11·666 ounces per ton.
2. Galena and zinc blende in quartz : gold, none ; silver, 48·125 ounces per ton.

During the season 330 miles of patent log surveys and 540 miles of track surveys were made.

Mr. McEvoy was assisted by Mr. J. McGregor, B.A.

The total cost of the exploration was \$1,459.73.

Mr. R. G. McConnell obtained leave of absence last summer for the purpose of visiting the European Alps and studying their structure as an aid to further work in the Rocky Mountains of Canada, and the field work done by him last summer was limited to an examination of part of the Bow River valley, in Alberta.

Mr. McConnell supplies the following statement respecting this examination: "This work was carried out during the month of June and was undertaken with a view of ascertaining whether the coal-bearing Cretaceous rocks of the Cascade basin recur east of the mountains. The section along the Bow proved to be too complicated and was intercepted by too many concealed intervals to trace the sequence of the formations definitely throughout, but sufficient evidence was collected to show that in all probability the conglomeritic beds exposed at the Kananaskis Falls are the equivalents of those overlying Marsh's mine, south of the Gap siding in the Cascade basin, and that the underlying dark shales consequently represent the coal-bearing formation. East of the



mouth of the Kananaskis the conglomerates and underlying shales fold over a light anticlinal, and several hundred feet of the latter are exposed without any coal seams being seen. The summit of this anticlinal, which occurs three-quarters of a mile east of the mouth of the Kananaskis river, offers the most favourable site for testing by means of a bore hole for the presence of coal. The coal horizon of Marsh's mine, assuming the identification of the conglomerates to be correct, lies at this point at a depth of 1,300 feet below the surface. There is, however, no absolute certainty that even if this depth was reached coal would be obtained, owing to the lack of persistence of the Cretaceous coal seams, and on the other hand workable seams might be struck at a much less depth. The rocks near the mouth of the Kananaskis river are comparatively undisturbed, and coal, if present, would be much less crushed and also more easily worked than is the case with many of the seams enclosed between the more highly inclined beds of the Cascade basin, and on this account a bore hole to test its presence would be desirable.

"In returning east I descended the Bow in a boat as far as Gleichen, for the purpose of studying the mode of junction between the eastern and western drift, and on the way collected a number of interesting facts bearing on this subject which will be published later on. Cost of exploration, \$324.85."

During the past summer Mr. J. B. Tyrrell, and Mr. D. B. Dowling, with Mr. J. C. Gwillim as assistant, completed the geological examination and mapping of Lake Winnipeg, and made reconnaissance surveys of many of the streams flowing into both the eastern and western sides of this extensive body of water. Mr. Tyrrell reports as follows: "The two small sail-boats that had been stored at Selkirk at the end of the season 1890 were repainted and again placed in the water. Supplies for a month were procured from Capt. Wm. Robinson, and arrangements were made with him to have provisions shipped from time to time to various places around Lake Winnipeg, where they could be obtained, in passing, without unnecessary delay. Two canoes had been ordered from Peterboro' for the examination of the streams flowing into the lake, but they did not arrive till later in the summer.

"On the 5th of July, after having been delayed in Selkirk for several days by wet and stormy weather, we started northward in tow of the steamer *Sultana*, and early on the morning of the following day reached the harbour at Swampy island, whence we sailed eastward to the mouth of Beren's river.

"Having determined to divide the party in order to accomplish a wider range of exploration during the season, Mr. Dowling was sent northward with the larger sail-boat to examine St. George and Sandy islands, to take levels on the Saskatchewan river, to follow the west shore of the lake from Limestone bay southward to the mouth of Red river, and to explore the streams emptying into that side of the lake. This work he has successfully performed, as is shown by his report appended hereto.

"From Beren's river I turned southward and devoted the summer to a close examination of the eastern shore of the lake up to the mouth of Red river, and an exploration and survey of the principal streams discharging into that portion of the lake lying north of the straits at Dog Head, including Loon, Wepiscow, Wanipigow, Manigotagan, Sand, Black, Winnipeg and Brokenhead rivers, and thus it has been possible to outline with some degree of accuracy the extent of country underlain respectively by comparatively barren granites and gneisses and by Keewatin schists and quartzites which might be profitably examined for the presence of the ores of the richer metals.

"The investigations of Mr. Low, in 1886, had shown that Beren's river, throughout the whole of the course followed on his journey to Hudson's bay, flowed through country composed of Laurentian granites and gneisses, and from the mouth of this river up to Dog Head straits, the shore of Lake Winnipeg is composed of similar rocks. At this latter point these gneisses begin to assume a very regularly banded arrangement parallel to the lake, and a few miles further south dykes of dark green trap begin to make their appearance, running in the same direction. Then irruptive rocks continue close to the east shore as far south as Wanipigow or Hole river, where they merge into an exten-



sive area of eruptive volcanic rocks and agglomerates that form the base of the Keewatin series. On ascending the streams that flow into this portion of the lake, namely, the Loon, and Wepiscow or Rice rivers, the gneiss is seen to be very regularly and evenly banded near the eruptive rocks, while further east it changes imperceptibly into the coarse grey irregularly foliated Laurentian gneiss typical of that whole region. Punk island and the many small islands between it and Black island and the main shore were examined, and while the former at its eastern end was found to be composed chiefly of St. Peter's sandstone, the latter consists of altered conglomerates quartzose sandstones, agglomerates, chloritic and sericitic schists, &c., similar to those found in the typical Keewatin in the Huronian districts elsewhere. The quartzites and conglomerates are somewhat more easily eroded than the adjoining volcanic rocks, and they therefore lie in a hollow which is flanked on one side by Black island, and on the other by the west shore, the beds standing generally at a high angle and striking parallel to the general curving trend of the shore.

"After these islands had been examined, Wanipigow or Hole river was ascended to the lake; a survey was made of the lake, and the river was also examined and surveyed to the first heavy rapid above the lake, beyond which we were unable to proceed on account of the lowness of the water. At its mouth the river breaks through a belt of evenly banded gneisses, above which it flows for ten or twelve miles through a rich alluvial plain wooded with poplar and white spruce, the banks on either side rising to a height of from fifteen to twenty feet above the water. Very little rock is to be seen, but any exposures that do outcrop from beneath the till and alluvial deposits consist of massive coarse amphibolites and green chloritic schists. On Wanipigow lake the rocks are also almost entirely of the same character, though on some places on the north shore the gneiss approaches close to the water, and the contact of the green Keewatin schists and the Laurentian gneiss is well shown. Speaking generally, the lake and valley of the river lie in a trough of Keewatin schists, the north side of which is bounded by ridges of Laurentian granites and gneisses, while the south side rises in hills of more compact green schist the contact of which with the Laurentian was not here observed.

"A stream called English river, a tributary of Wanipigow river, and the lake into which it expands in the middle of its course, were likewise surveyed. This river in its lower portion also flows over Keewatin schists, but the lowest rapid occurs at the contact of the schist and gneisses, and above this its course is through rugged country composed of high barren hills of grey gneiss thinly wooded with a stunted growth of small Banksian pine. Specimens of galena and chalcopyrite, stated to have been found on the north shore of Wanipigow Lake, were shown to the writer, and the occurrence of these minerals is not improbable along the above-mentioned contact line.

"From the mouth of the Wanipigow river to Manigotagan or Badthroat bay the shore is composed of greenish grey evenly banded gneisses with schists and altered traps of the Keewatin series, while near Clement point these are overlain by St. Peter sandstone (Chazy), this being the most northerly point at which Palaeozoic rocks have been recognized on the east side of the lake.

"Manigotagan or Badthroat river was then ascended to Rat Portage lake, a track survey was made of this lake, and the river was ascended for a short distance above it. The river is remarkably picturesque throughout, consisting of long quiet stretches of clear brown water, separated by rocky rapids or high abrupt falls which are passed on portages of an average length of from one to two hundred yards, twenty-three of which must be ascended on the way from Lake Winnipeg to Rat Portage lake.

"At the mouth of the river and up to the second portage, the rock is a thin and evenly banded hornblende schist, while throughout the rest of the distance to the latter lake it consists entirely of Laurentian granites and gneisses, rising in places in hills of from one to two hundred feet in height, the summits of which present a wintry bareness throughout the year.

"From the mouth of Manigotagan river to Pt. Metasse, north of the mouth of Winnipeg river, granites and gneisses everywhere compose the points on the shore, and these points are usually connected by gently curved sandy beaches in front of low-lying alluvial land.

"Sand river was ascended through this alluvial plain to the first rapid where it was found to be too small for further ascent with our large Peterborough canoe, but the rock, where seen, was similar to that on the shore.

"Black river was also ascended past thirty-three portages to a point south of Rat Portage lake, where a portage a mile and a-half in length strikes off to the northward. The stream is shallow and much obstructed by boulders and sandbars throughout, and the rocks on either side are everywhere Laurentian granites and gneisses.

"Winnipeg river was ascended to the mouth of the Whitemouth, and on the return a track survey was made of Lac du Bonnet.

"The rocks on the main stream are all granites and gneisses, but towards the east end of Lac du Bonnet, and around the mouth of L'Oiseau river, thin-bedded green schists and altered traps, doubtless of Keewatin age, make their appearance, striking up the valley of the latter stream.

"Above Lac du Bonnet the banks of the river, as far as examined, were chiefly composed of till, with many limestone boulders, and the rocks are scored in a S. S. E.'ly as well as in a S. W.'ly direction, showing that the earlier glacier moving south-eastward over the Palæozoic Lake Winnipeg basin had extended at least this far eastward, though there is no sign of limestone drift on the main portion of Lac du Bonnet itself or on the lower part of Winnipeg river.

"From the mouth of Winnipeg river the shore of Lake Winnipeg was explored to the mouth of Red river, and a short trip was made up the Brokenhead river to the first rapid. A paced survey was also made of Elk island, and excellent sections of St. Peter's sandstone were found, both on this island and on the long point of land opposite. In this vicinity were also found many interesting sections of the drift deposits, some of which show the alluvial clay of the east shore of the lake interbedded with glacial till, proving clearly that this clay was deposited close to the oscillating front of the glacier descending from the highlands to the east.

"As the stormy autumn weather had now set in, the boats and supplies were stored with Capt. Wm. Robinson at West Selkirk, and Lake Winnipeg was left for the season. On the way east a short time was spent at Bird's Hill to examine the remarkable ridge of gravel that there rises through the surrounding hard boulder-clay, and again at East Selkirk to see the section of Trenton limestone exposed there in a quarry north of the railway. The exposure is an interesting one, as it shows a hill of limestone, the top of which has been broken up and shoved along by the glacier of the Winnipeg basin, leaving what is known as a *tail* deposit of loose material behind a protecting *crag*. It is chiefly from this broken *tail* material that the blocks of limestone used in Winnipeg for building purposes are quarried.

"I also remained for two days at Sudbury for the purpose of comparing the rocks that are there so rich in copper and nickel with those found on the east side of Lake Winnipeg, and it was very gratifying to see the remarkably close similarity between the two sets of rocks.

"During the season forty-four large and eighty-eight small photographs were taken of characteristic sections and surfaces of rock, and of particularly interesting features of the landscape.

"The following is Mr. Dowling's account of the work accomplished by him during the summer:—

"I left Beren's river on the 8th of July, after having secured the services of a competent sailor. Our first halt was at George's island, where I made a paced survey of its shores. We then called at Little George's and the Sandy island. After stopping at Poplar Point to take observations, our next halt was at Selkirk island, the shores of which were examined, and a traverse made with compass and boat log. There are here several small exposures of a hard mottled dolomitic limestone, somewhat similar to that on the mainland west of this island. We went from here to the Grand Rapids, where I levelled across to the head of the tramway with the transit, making a section on the tramway. This road is about three miles and a half long, and rises at its highest point to 128 feet above the lake, having a total rise of 71 feet between its upper and its lower end.



Four well-marked lake beaches are crossed at elevations of 78, 91, 95 and 118 feet above present lake level. The lower one was followed about two miles north, and its crest was found to vary in elevation from 78 to 80 feet. With an Indian and his canoe we ascended the Saskatchewan and crossed Cedar lake to the "Mossy portage," an old portage road between Cedar lake and Lake Winnipegosis, to determine the heights of several gravel ridges. The difference in the level of the two lakes was then only nine inches, Lake Winnipegosis being the higher. After returning, a trip was made along the west shore towards Limestone bay with a Peterborough canoe that had just arrived. From Grand rapids I sent the sail-boat to Reindeer island and with the canoe went along the shore south to near Clark's point, crossed over to St. Martin islands and thence north joining the boat at Reindeer harbour. We then sailed along the west shore to Little Saskatchewan, where the boat was left for another canoe trip. We went up the Little Saskatchewan river, to the elbow, portaged over to the South Branch of the War Path river and descended this stream to its mouth; at the time of our trip this stream was very shallow and we found it slow work getting down. The country through which it runs is sloping gently to the north-east and is wooded principally with poplar and tamarack and a few spruce. From the mouth of the Little Saskatchewan we ran along the shore with the large boat and examined the cliffs of yellow dolomite west from Cat Head.

From Kinnow bay to Fisher river the shore is rather low, the land behind being very little above the lake, with the exception of a few ridges of drift material that seem to trend in a north and south direction and where extending into the lake form boulder bars and boulder-strewn points.

At Fisher river there is a large Indian reserve having good farming land a short distance from the mouth of the river, the lower part near the lake being all splendid hay flats. The Indians seem to be very comfortable and have several good fields of grain and many fine looking cattle. The river for about twenty miles is a sluggish stream with a few shallow parts with some current. The greatest fall is at the Big Rapids and is about four feet, but in the whole length of the river to The Forks there is only about twenty feet fall. The country passed through is quite level, wooded for the most part with poplar; but a considerable portion has been fire-killed and almost reduced to prairie. Between the patches of timber open hay land was seen and swamps are reported rare, so this should make excellent land for settlement.

From Dog Head to Bull Head the exposures are of Trenton limestone and were examined and measured. From Bull Head to Big island the underlying St. Peter's sandstone is frequently exposed in the same cliff with the limestone. The east side of Big island is seen to be underlain by limestone which is exposed in sections of from 10 to 20 feet extending from the north end to about the middle of the island. The southern part is covered principally with drift material causing the shore at its southern extremity to be boulder strewn and the water shallow. On the 29th of September I returned to Selkirk and stored the outfit; leaving the boat in the care of Mr. Muckle, Indian agent at Clandeboye.

I was about starting for Ottawa when Mr. Tyrrell returned from the lake and commissioned me to examine the rock exposures at Stonewall, Stony mountain and lower Fort Garry. At Stonewall I observed two sets of glacial grooves on the surface of the rock, the striae running S. 25° E. and S. 10° W., the latter evidently the newer.

The present season's work enables us to complete the section of the Cambro-Silurian formations, which rest unconformably on the Archæan rocks of the east side of Lake Winnipeg and seem to underlie conformably the Silurian which was observed at Grand rapids by Mr. Tyrrell.

Typical examples of the lower division consisting of beds of friable sandstone and shales may be seen at Grindstone point and Deer island.

The middle division is represented by mottled yellow limestones at Selkirk, Dog Head and Beren's island, while the upper division consists of impure limestones and shales as at Stony mountain and Clark's point, Lake Winnipeg.

About forty photographs of the various rock exposures were taken. Mr. Dowling left for Ottawa on the 11th of October.

"Cost of season's exploration \$2,059.29."



Mr. McInnes left Ottawa on the 17th of July, with instructions to continue the work of 1890 in western Ontario, between the Lake of the Woods and Thunder bay, Lake Superior, and arrived at Port Arthur on the 20th. Provisions and men were obtained there for the season's work, and Mr. Chas. Marks, of Port Arthur, was engaged as assistant for the season. Mr. McInnes reports as follows:—

“On the 25th a start was made southward from Savanne by canoes, and the interval between this date and the 16th of August was spent in an examination of the country lying on either side of Kashabowie lake.

“The streams flowing into the lake were first ascended and the lakes along their course were surveyed by prismatic compass and boat log. A survey of the same character was made of Trout lake, which lies to the east of the north end of Kashabowie lake.

“The main body of this lake, which is about six miles in length and a mile and a-half in width, lies entirely within the gneiss area which occupies the greater part of the shores of Lac des Mille Lacs. This gneiss was found to extend continuously northward from Trout lake and to occupy the whole of the country northward to the Savanne river and the Canadian Pacific railway track. The country about the height of land here is an immense swamp which divides the water of Lake Superior and Lake Winnipeg, sparsely wooded with tamarack and stunted spruce, and with here and there low ridges of granitoid gneiss rising from the general level.

“After completing the survey of Trout lake, Asagesh or Crayfish river was next ascended, and a track survey made of it and a log survey of the lakes along its course. About a week was spent in surveying the lakes at the heads of its two branches and in fixing the southern limit of the Kashabowie belt of gneiss, at different points in the neighbourhood. The country about Round and Jackfish lakes was next visited, and a week was spent in tracing geological boundaries in that district. At the Huronian mine which has not been worked since 1885, the buildings, ten-stamp mill and vanners, &c., boarding house, shaft house, store houses, &c., were found in a good state of repair; the shaft was however filled with water and the vein could be seen only in the extension to the south-west at the Highland mine opening, where it is clearly defined and highly mineralized with iron and copper pyrites. There seems good reason to hope that with possible future railway extension in that direction, and the consequent improvement in means of transport, the properties on this vein may be profitably worked.

“Returning to Lake Shebandowan a survey was made of a series of lakes and streams extending northward to a point near the Canadian Pacific railway at Nordland station. The granite-gneiss was found to extend from a point near the Muskeg river which enters Lake Shebandowan from the north near its outlet northward to the railroad track, the belt of Keewatin rocks which has a considerable width on Lac des Mille Lacs having given place to the gneisses a short distance to the east of the lake.

“The remainder of the canoeing season was occupied in an exploration of the country lying to the south of Lake Shebandowan. A canoe route was followed leading southwards to Kekekuab river, a branch of the Mattawin, and returning by a chain of small lakes leading across to Greenwater lake. With the exception of one small lens-shaped area of gneiss which lies about three miles to the south of Lake Shebandowan, Keewatin diorites and schists were found to extend over the whole area southward, as far as Kekekuab lake, where the northern edge of the broad belt of gneiss of Northern Light and Seiganagah lakes is struck. A number of bands, 20 feet or thereabout in width, of magnetite interstratified with schistose layers of hornblende, quartz, &c., were noticed in the dioritic areas of the Keewatin in this district. The magnetite occurs in narrow bands a quarter of an inch in thickness with thin layers of about the same thickness of the schistose material interstratified, the whole often highly contorted and twisted locally, though preserving a general trend parallel with the enclosing diorites and schists. Specimens of this ore collected from near the eastern side of Greenwater lake were submitted to Mr. Hoffmann, the chemist of the department, who describes it as ‘a very fine grained, almost compact, schistose magnetite from Greenwater lake, district

of Thunder Bay, Ont.,—collected by Mr. McInnes, 4th October, 1891,—has been examined by Mr. F. G. Wait, and found to contain :

Metallic iron.....	52.82 per cent.
Insoluble matter.....	22.31 do
Titanic acid.....	none

a good iron ore.

"This, it will be seen, is a most encouraging report, both in the high percentage of metallic iron and in the absence of titanic acid, and gives good reason for the hope that a thorough exploration of the region will reveal valuable deposits of this ore. A number of locations have already been taken up in the vicinity of the Mattawin river and during the past summer considerable work was done towards testing some of these properties, the result of which has not however been learned.

"In the district further west very commendable enterprise has been shown by the Marks Company in thoroughly testing their iron properties on the Atikokan by the diamond drill. It is stated that the results have been satisfactory. Mr. Smith who makes a separate report will deal with this region in detail.

"In the whole region explored during the summer, the areas of land adapted for cultivation are few and very limited in extent. As pasture much of it might be greatly improved. This is well shown by the luxuriant growth of red and white clover and timothy grass where seed had been scattered around the old construction camps along the line of the Canadian Pacific railway. But doubtless the future of the district will depend largely upon its contained minerals and it is to be hoped that the present very promising discoveries of extensive deposits of iron ore may be found to warrant the building of the necessary works for smelting the ores somewhere in the neighbourhood."

Mr. McInnes returned to Ottawa on the 30th of October.

The total cost of the season's explorations was \$994.71.

Mr. Smith left Ottawa on the 16th of June, and was joined in Toronto by his assistant, Mr. William Lawson, whence they proceeded at once to Port Arthur.

After securing men and purchasing supplies, Mr. Lawson left English river on the 25th of June to make a compass and log survey of the chain of lakes running south-westerly from there, which it was thought might be partly within the area of the Seine river sheet. On the completion of this survey as far as the north-eastern arm of Turtle or Crow Rock lake, he travelled to Fort Frances.

Mr. Smith went through the chain of lakes and streams comprising a hitherto unknown route from Ignace to the headwaters of the Big Turtle river. He passed down this river, surveying on the way Pekagoning lake, which encroached on the northern limit of the Seine river sheet; and from thence he proceeded to Fort Frances to rejoin Mr. Lawson and obtain supplies.

The united parties left Fort Frances on the 18th of July and ascended by the Manitou canoe route to the northern limit of the area included in the Rainy lake sheet, No. 3, already published. Work was commenced here, in accordance with instructions, on the area to be included in the sheet No. 4, north of No. 3. A micrometer and compass survey of the east side of Manitou lake was made, also of a smaller lake to the west of it; and the survey commenced in 1885 of the smaller lakes on this route, between Manitou and Little Wabigoon lakes, was completed.

From Wabigoon Messrs. Smith and Lawson surveyed a route to the headwaters of the Big Turtle river, securing another tie line connecting the surveys of 1890 with the line of the Canadian Pacific railway. From the headwaters of the Big Turtle river Mr. Smith proceeded to Martin lake to verify the existence of a band of Keewatin schists supposed to occur south of this lake; this supposition was proved to be correct. Mr. Lawson at the same time examined some small lakes shown on the timber limit surveys in the vicinity of Clear and Clearwater lakes. On their reunion they proceeded to English river.



After obtaining more supplies, they endeavoured to discover a route south-westerly from English river to the Seine river, but failed to get more than 16 miles. Then the party descended by the route traversed by Mr. Lawson in July, from the English river to Long lake, where the party again separated, Mr. Smith pushing through a hitherto unknown route to the Seine river, which resulted in the addition of six small lakes to the topography of the Seine river sheet.

Thence he proceeded to Steep Rock lake to rejoin Mr. Lawson who had descended by the Eye river to the Seine river, and thence up it to Steep Rock lake, making some geological observations needed to complete the work of 1890.

In Steep Rock lake five days were employed in investigating an apparently unformable series of rocks found here, and which it is hoped will afford a further clue to the elucidation of the Archæan structural geology of the district.

From Steep Rock lake Mr. Smith ascended the Atikokan river to mining locations R. 400 and R. 401 where three days were spent in obtaining a section of the iron-bearing rocks, the relative age of which is not yet determined, and in examining the iron ore deposits of these locations. From here he proceeded to Savanne, arriving there on the 1st of October.

From Steep Rock lake Mr. Lawson descended the Seine river and crossed into Beaver lake which he surveyed, and after obtaining a section from Steep Rock lake to Clearwater lake he proceeded to Savanne, where he arrived on the 3rd of October, and closed the season's work.

The topography of the Seine river sheet is now complete, several lakes unknown last season having been added, but the geological problems involved in this area are so important that a few weeks more will be required to further investigate them. A brief sketch of the geology of this field was given in the summary report for 1890, p. 28.

Mr. Smith discovered excellent indications of a broad zone of magnetic iron ore, on the west side of a lake on the Big Turtle river called "The Lake where the River Bends." The ore is associated and interbanded with micaceous schists. The bands vary from fractions of an inch to three feet or more in thickness, and this interbanded occurrence of ore and schist in its broadest development appears to be from 150 to 200 feet wide. To the south-east near the southern end of the lake this band appears to be cut off by a fault and from this fault northward the iron ore could not be traced for more than a mile and a-half, the rocks being so thickly covered with vegetable mould that exploration in this direction was difficult and uncertain. The rocks here strike north-west and south-east and dip from  $45^{\circ}$  to  $55^{\circ}$  to the south-west. They are very evenly stratiform in appearance and seem to constitute a tapering band trending eastward, then south-eastward, from the broad band of Keewatin schists so largely developed in Manitou and Little Wabigoon lakes, and from certain ferruginous angular fragments found in the north-eastern arm of Manitou lake, Mr. Smith is inclined to think that more ores may be found in this vicinity, in the same geological horizon as the above, in the near neighbourhood of the granites.

An analysis of these ores made by Mr. G. C. Hoffmann, chemist to this department, shows them to be very siliceous, yielding 40.17 per cent metallic iron and 37.21 per cent of insoluble matter, but no titanic acid.

The locality is about 19 miles south-west by south of Raleigh station on the Canadian Pacific railway. It could be reached by about 21 miles of railway through a comparatively level country. It would be possible, with light expense involved in building short tramways, to carry light ore trucks over the portages, four in number and aggregating one mile and a-half in length, to reach the Canadian Pacific railway by 40 miles of navigable water-way *via* Snake lake and Snake and Wabigoon rivers.

The ore is in such a position as to be easily mined, and considerable water power is afforded at the outlet and inlet of the Big Turtle river. Unless the ore is found, as usual in this country, to be much richer in the actual ore bodies than in the surface indications, it will, of course, be of no commercial value in competition with the rich ores of the Lake Superior district on both sides of the international boundary.



The gold locations on the lake west of Manitou lake were visited during the summer and some specimens from the veins collected. The field appearance is very encouraging. One vein in particular seems to be a very strong one and in some places is as wide as ten feet of promising looking quartz associated with soft soapy talc schist in soft chlorite schist.

The iron ores of the Atikokan river have in two locations been carefully tested this summer with very gratifying results, but the details of the diamond drill borings are not yet made public. On the completion of the Atikokan Iron Range railway it is hoped actual mining will be engaged in here. The ores are very rich and pure, running as high as 60 and 70 per cent of metallic iron.

Very little prospecting has been done in the Thunder bay and Rainy river districts this summer, said to be the result of the change in the Ontario mining laws.

The season's work was mainly geological in character, but some 150 miles of compass and micrometer lines, 100 miles of log and compass lines, and 50 miles of time traverse were run, serving as bases for the compass triangulation of islands and intermediate points.

Mr. Smith returned to Ottawa on the 10th of October.

Cost of exploration, including salary of assistant, \$1,234.

Dr. Bell was requested to complete during the summer, if possible, the geological survey of the area embraced in sheet 125 of the Ontario series which adjoins the Sudbury district sheet on the south. Mr. A. E. Barlow, M.A., was to assist Dr. Bell as during the four preceding years. With the approval of the Minister, the party was to include the following gentlemen: Messrs. A. M. Campbell, H. H. Walker, B.A.Sc., H. G. Skill, A. C. Robertson, W. G. Miller, B.A., and R. W. Brock. Mr. Barlow left Ottawa for the field on the 10th of July, and returned to this city on the 1st of October. Dr. Bell left on the 23rd of July, and returned on the 6th of October.

On the work of the party Dr. Bell reports as follows:—

“Mr. Barlow worked principally in the north-western part of the sheet, in the neighbourhood of Lake Panache, and between Collin's inlet, and the lower part of the Wahnapiæ river. He also visited some localities in the Sudbury district, near the line of the Canadian Pacific railway, for the purpose of obtaining mineral specimens. The details of his work are given in his own words herewith: ‘I have to express my entire satisfaction with the manner in which all the above-named gentlemen performed the duties allotted to them.

“‘The central and southern part of sheet 125, amounting to about one-half its area, is occupied by the waters of Georgian bay, while many channels and inland lakes diminish considerably the area of dry land in the remaining half.

“‘The north-east corner of the sheet is at the western extremity of Lake Nipissing, the north-west in the township of Hallam, the south-east in that of Shawenaga, while the south-west is near the south-eastern extremity of Grand Manitoulin island. Most of the topography of the sheet could have been represented pretty well by compiling the hydrographic surveys of Commander Boulton, R.N., the river and lake surveys of the late Mr. Murray, of the Geological Survey, and the lines run for the subdivision of the land by the Crown Lands Department. Still some parts were either entirely unsurveyed, or were too poorly defined for our purposes, and we were obliged to survey them ourselves.’ The portions executed by Mr. Barlow are described by himself in the statement above referred to.

“My own topographical work embraced the following: A micrometer and compass survey of the shores and islands of the large bay between Great Cloche island and the north shore of Lake Huron. The islands in this bay are exceedingly numerous, amounting probably to a thousand or more, and as the bay has heretofore been without a name, I called it Bay of Islands, with the approval of Captain Boulton and the inhabitants and lumbermen of the neighbourhood. Cloche channel and peninsula, and the peninsula between Bay of Islands and McGregor bay were next surveyed in the same manner,

and finally the latter bay, including a very large number of islands, and also the channels in its northern part, and those lying still further north. This work was begun on the 28th of July, and completed on the 29th of August. In its performance I was assisted by Messrs. Miller and Brock.

"Track surveys were made of a lake five miles in length in the interior of Great Cloche island, and of the five principal lakes lying between Killarney bay and the Mazinhozin river, which discharges into Collin's inlet, namely, George, Trout, Sturgeon, Ka-ko-kis and West lakes with their connecting streams. A number of smaller lakes in this district were also located. In this work I was assisted by Mr. H. G. Skill and Mr. Myles Tyson, the latter of whom had a good knowledge of the local topography which proved of much service in economising our time. Being favoured with very fine weather we were enabled to accomplish this part of the work between the 5th and the 11th of September.

"On the 13th of September we proceeded by steamer from Killarney to the French river region in order to add to the geological information which had been already obtained there by the late Mr. Alexander Murray and myself and to survey and locate some topographical features not previously indicated upon any map. Careful track-surveys were made of a long narrow channel running north-westward from the expansion of the river where the North Channel West is joined by the South Channel East; of a canoe-route from the head of this channel to Trout lake, of this lake itself (which is twelve miles long) and of a canoe-route by way of Ka-was-ki-gama, or Crooked lake, to the rocky delta of the middle group of outlets of French river. Numerous minor additions were likewise made to our knowledge of the topography of this region and also some corrections of the topography already laid down upon the maps.

"The part of Grand Manitoulin island which comes within the sheet, and consists principally of its eastern peninsula, had been examined by myself in 1859, 1865, 1876 and 1886 and the boundaries of the various formations traced out and represented upon the geological maps; but for the sake of attaining greater accuracy in some localities I sent Mr. Miller with three men to go over part of the ground during the first half of September, and my own time and that of Mr. Miller and Mr. Brock for the last week of the season was devoted to the same work, so that the geological lines in this part of the sheet can now be represented in accurate detail. Mr. Skill was employed from the 19th of September to the end of that month in tracing the details of the boundary between the Laurentian and Huronian rocks, from Killarney bay north-eastward to the lakes we had surveyed behind Collin's inlet.

"In regard to the geology of the sheet, we were enabled to fill in all that was required to complete it for publication. The area of dry land is only about half that represented upon the Sudbury sheet and the distribution of the rock-formations was more easily worked out than upon the latter, as the region was more accessible and as the greater part of its area consists of Laurentian gneiss and nearly horizontal Silurian formations. We had also the advantage of the previous geological work of Mr. Murray and myself in the district. Besides these two systems the Huronian is represented by a small area in the north-western corner of the sheet.

"The Laurentian rocks which come within the sheet probably belong to the upper division of the system and consist of grey and red gneisses, generally in distinct beds, which run comparatively straight for considerable distances. The grey varieties are generally coarser than the red and their foliation is often indicated by the parallelism of the larger diameters of the grains rather than by distinct bedding or bands of colour, although these are also often present. But both the grey and red varieties become schistose in many places, and they sometimes enclose regular belts of hornblende and mica-schists, the latter always holding garnets.

"On the coast of Georgian bay, from the township of Carlyle to the eastern mouth of French river, the strike is uniformly to the north-eastward and the dip generally to the south-eastward at tolerably high angles, but in the central part of the course of French river it is mostly north-westward and westward, but with many local variations. From the eastern mouth of French river to Shawenaga bay the strike varies from north-west to south-west.



"The boundary line between the Laurentians and Huronian leaves the head of Killarney bay and runs north-eastward with a curve to the south-east and reaches the northern edge of the sheet in township 68 a short distance east of Lake Panache. From this line south-eastward as far as Collin's inlet, the rock is massive or shows only slight or local foliation and most of it might be called red hornblende-granite. A similar rock, described by Mr. Murray as (quartz) syenite, occurs for a breadth of two miles between the Western and Middle mouths of French river.

"The Huronian rocks of the north-west corner of the sheet consist principally of quartzite, but greenstones sometimes occur among them, and they are occasionally interstratified with greywackes, clay slates, crystalline schists and other rocks in smaller quantities. Among the latter is the band of dolomite described in my report for 1876, page 209. The greenstones form a much less prominent feature among the quartzites and greywackes than further inland. They consist of several narrow belts in the neighbourhood of Lake Panache and among the islands near the north shore of Lake Huron, where they are traceable for from one mile to three, and correspond in most cases with the general direction of the strike. Much smaller masses of greenstone of various forms and lying at every angle with the strike are enclosed among the quartzites in all parts of their distribution within the sheet. Along the contact between the two systems the granite and the quartzite are a good deal intermingled; large isolated pieces of the one being incorporated in the other.

"The quartzites form the La Cloche Mountains and the long and high points jutting south-westward into Lake Huron between McGregor and Killarney bays, as well as Badgeley, Centre and Heyword islands. Our surveys appear to confirm my previous opinion that the several belts of quartzite forming the La Cloche Mountains are repeated in these high points and islands which represent the opposite side of a syncline or possibly an anticline.

"In the La Cloche mountains, which rise from 400 to 750 feet above Lake Huron, and also around Bay of Islands and McGregor, the strike is nearly east and west with high or almost vertical dips, mostly to the north; but further south it follows the axes of the points and islands just mentioned.

"A belt of sericite schist was traced on the north sides of Bay of Islands and of McGregor bay and on the isthmus between them and another belt of the same rock through the islands of these bays at a distance of a mile and a quarter south of the first. The greenstones above referred to were found principally towards the south side of Bay of Islands, but in the area covered by McGregor bay and in the channels to the north of it they occur in various parts, but are most abundant in the central and western portions. Clay slates were found in some abundance in the northern part of the township of McKinnon.

"The rocks of the whole district covered by the sheet have been everywhere glaciated. A number of photographs illustrating glacial action were obtained and much interesting information was collected in reference to the phenomena of the drift."

Expended on field work by Dr. Bell, \$950, by Mr. Barlow, \$1,080.

Dr. Ells left Ottawa for field work on the 8th of June with instructions to complete the revision of the geological boundaries as laid down on the Montreal or south-west quarter sheet of the map of the Eastern Townships and then to continue the work westwards up the valley of the Ottawa and its northern tributaries. In carrying out the first part of this work which was completed on the 20th June, Dr. Ells reports that a "number of fossils were collected by Mr. W. E. Deeks, B.A., from places on the Calciferous, Chazy, Trenton and Hudson River formations, where fossils had not previously been collected by the officers of the survey. On the 22nd of June Dr. Ells, accompanied by Mr. F. D. Adams, of McGill College, started from Grenville for Iroquois Chute on the River Rouge near Trembling lake, with a view to re-examine the character and relations of the limestone and gneiss bands of the Trembling lake and mountain, and also to trace out the western boundary of the great anorthosite area of Wolfe and Grandison.



"The country around Trembling lake was examined, then the Macaza river was ascended to its head, thence crossing to a lake on the west branch of the Devil's river. This lake is not laid down on the Provinces map, and of which we made a track survey from Devil's to its junction with the outlet of Trembling lake, there fixing the western limit of the anorthosite in this direction.

"The first part of the season to the 20th of June, was spent in the examination of the country to the south and south-west of Montreal, necessary for the completion of the south-west quarter-sheet of the Eastern Township map. Valuable collections of fossils were made from the Calciferous, Chazy, Trenton and Hudson River formations by Mr. W. E. Deeks, B.A., many of which are from places not previously examined by the officers of the survey. A very large portion of this area is covered by a deep deposit of drift, and rock outcrops are, as a consequence, rarely seen. The geological boundaries laid down on the map of 1866 were carefully followed, in so far as the drift would permit, but in such an area these must of necessity be largely conjectural.

"Accompanied by Mr. F. D. Adams, of McGill College, I started on the 22nd of June, with four canoe-men, from Grenville to Iroquois Chute, on the River Rouge, near Trembling lake. This point is forty-four miles in a direct line nearly magnetic north from the former place, but by road is not far from sixty-five miles. This distance we traversed by teams, having arranged beforehand to secure our canoes at the Chute. Our object was to ascertain the characteristics and the relations of the lowest gneiss of Trembling mountain to the gneisses and limestone bands of Trembling lake; as well as to trace out the western boundary of the great anorthosite area of Wolfe, Grandison and Archambault and its extension through the area north-west of the latter township. In the examination of the Trembling lake area all the streams and lakes in the vicinity, to a distance of six to eight miles on all sides, were visited. Trembling mountain itself was ascended and its elevation above the surface of the lake at its front found by aneroids to be 1,720 feet, or within three feet of the elevation, as determined by Sir William Logan in 1858 by triangulation. This added to the elevation of the upper terrace at Iroquois Chute, taken from the railway survey to this point from St. Jerome which is here stated to be 875 feet above Lake St. Peter, and which is approximately the same as the surface of Trembling lake, would give for the summit of this mountain a height of about 2,585 feet above the sea. From the Iroquois Chute we ascended the Macaza river, and thence up that stream and its branches to the height of land between there and the lakes at the head of the west branch of the Devil's river. Thence by portage we reached Lac des Baies and ascended the west branch of the Devil's river to its junction with the north branch, a short distance from Devil's lake. This stream is not laid down on any map, and, in fact, this section of the country is entirely unknown to any except a few hunters who occasionally cross by this route to the waters of the Mattawin. The surface is largely drift-covered and ledges are rarely seen even around the lake shores. From the Devil's lake the main stream (Devil's river) was descended to its junction with the outlet of Trembling lake; a track survey being made for about thirty-five miles. The stream is in places very rough and presents huge cliffs of gabbro at several points. By this survey the western limits of the anorthosite area above referred to can be fixed. Finding, however, that the relations of the limestones to the associated and generally underlying gneiss could not be so satisfactorily determined in this area as in that further south, owing to the prevalence of the drift, and there being no further funds at our immediate disposal, the canoe-men were brought back to Grenville by team as being the cheapest and most expeditious way and there paid off. In consequence of there being no map of the country north of the Ottawa river, in the counties of Argenteuil and Ottawa, on which the roads were laid down with any approach to accuracy, the survey of this area was taken up in company with Mr. Deeks, who had already surveyed most of the roads in the flat country between Lachute and the Ottawa and extending west to Calumet. The greater part of the roads in the counties just mentioned, as far west as Thurso and north for ten miles beyond the Iroquois Chute on Rouge river, have now been surveyed, partly by pacing and partly by wheel survey, and from these a skeleton map of this district is now being constructed on which the

distribution of the limestone bands will be shown at many points, but another season's work, devoted to the examination of the many lakes which are scattered throughout the district, will be required before the exact relations of the gneiss and limestone bands can be determined. All the roads between Point Fortune and the province boundary, on the east, and the South Nation river on the west, were surveyed to a distance of ten to twelve miles south of the Ottawa river, and the boundaries of the Calciferous, Chazy and Trenton finally revised. Much of this area is also largely drift-covered, but where rock exposures are seen they are generally highly fossiliferous, so that the determination of the formations named is comparatively easy. Good collections of fossils were obtained from various points near L'Orignal and Little Rideau, at both of which places Mr. Deeks found extensive quarries had been opened.

"The eastern outcrop of the anorthosite area through Wolfe, Beresford and further north and east in the county of Montcalm was traced by Mr. Adams, while in Howard and Morin its limit was noted by Mr. Deeks. Owing to the present unfinished condition of the work in Argenteuil and Ottawa counties conclusions cannot be stated. The Laurentian gneiss and limestone at Lachute are overlain by the Potsdam, of which a good exposure is seen about a fourth of a mile east of Lachute station, north of the Canadian Pacific railway, which is apparently conformably overlain by ledges of fossiliferous Calciferous rocks, the fossils being obtainable from ledges in the North river, near the paper mills, at a very low state of the water only. The Calciferous apparently extends thence to the Ottawa, though much of this area is heavily covered with drift, but at Carillon nearly horizontal Chazy sandstones are exposed which extend thence up to Grenville. At St. Andrews a prominent ridge of Laurentian red gneiss begins on the east side of the North river and extends for about seven miles eastward with a breadth of about two miles. This has not before been noted. It is separated from the area north of the Lake of Two Mountains by ledges of Potsdam sandstone. The general attitude of all the fossiliferous strata in the vicinity of the Ottawa river and for some miles to the south is horizontal.

"The limestone of the Laurentian system in the county of Argenteuil would appear from the observations of the past season to represent its upper portion. They are generally seen to occupy synclinals in the gneiss and a succession of these limestone synclinals with gneiss anticlinals can be traced for many miles across Argenteuil and Ottawa counties. The limestones hold inclusions of rusty gneiss which have once existed as interstratified bands and have been drawn out and frequently twisted into curious forms. Scattered crystals of apatite, pyroxene, graphite and sometimes garnet occur in these beds, and often fragments of crystalline orthoclase which on weathered surfaces stand out prominently, and at first sight cause the rock to assume the aspect of a conglomerate. The lower portion of the limestone bands are associated with layers of quartzite and rusty gneiss, with beds of a whitish highly felspathic rock, and these are generally repeated regularly on each side of the limestone synclinals, passing downwards into greyish, greyish-red and reddish gneiss. The general strike of the rock is a few degrees east of north, but at several points the direction changes to nearly east and west and occasionally the various members appear to be overturned. It has been found very difficult to trace the limestone areas continuously, owing in part to these being to a large extent concealed by drift, but also to the fact that many of them are local in their development, as can be seen by their frequently thinning out and ending often quite abruptly both to the north and south. In the northern part of Argenteuil the limestone decreases in development and on the branch of the Upper Rouge called the Macaza disappear altogether; this may, however, be to some extent due to the covering by drift, but not altogether. East and north of Lachute the beds of limestone also become very limited, but going west through Grenville, Petite Nation, &c., they become much more extensively developed.

"The economic features of the district examined by us north of the Ottawa, in Argenteuil and eastern Ottawa counties, are at present comparatively unimportant. Deposits of mica, graphite and asbestos occur quite frequently, and some of these have been opened up but no mining has been done in this section for many years. The most



easterly observed outcrop of serpentine limestone, with asbestos, was at Silver lake, half a mile south-west of the inland lake at Wentworth. The asbestos veins were few and of small size. Small crystals of apatite and pyroxene were observed in limestone near Maskinongé lake, one mile and a-half south of St. Jovite in Grandison, but nothing of economic importance was noted.

"The party left Ottawa on the 8th of June and returned on the 14th of October. Expenses of the season \$1,136.

Roads surveyed by waggon wheel.....	850 miles
do do pacing.....	110 do
Track survey of Devil's river.....	25 do

"My associates during the past season were Messrs. W. E. Deeks, B.A., Robert MacDougall, B.A., and J. F. E. Johnston, Graduate Royal Military College, Kingston."

Mr. F. Adams, of McGill College, kindly undertook to complete the examination and mapping of the Laurentian area which lies to the north of the Island of Montreal and on which he had been working before he retired from the survey in 1890.

On this work he furnishes the following interesting report:—

"Leaving Montreal on June 22, I joined Dr. Ells at Grenville the same afternoon and proceeded at once with him to Chute aux Iroquois and Trembling lake where we arrived on the 24th of July, this district being on the line between the map above referred to and the sheet adjoining it to the west, which is being surveyed by Dr. Ells. The special work to be accomplished in this district was the determination of the limit to the north-west of the great Morin anorthosite area and the relation of the limestone bands to it. The former was fixed by a track survey of the Devil's river, an exceedingly rough stream, which runs in a southerly direction through the unnamed township lying north-west of Archambault and joining the outlet of Trembling lake about a mile from the lake. The study of the relations of the limestone bands to the anorthosite, however, was less satisfactory, large exposures of the former being found, but their relation to the anorthosite could not be determined, in most cases owing to the heavy drift which covers much of the country.

"No further reference to the north in this district is here required, as a report on it has been made by Dr. Ells. I returned to Grenville on the 22nd July.

"On the 4th of August I again left Montreal and remained in the field until the 27th of August completing my examination of various parts of the area, working as far east as the township of Brandon which was very carefully examined.

"The geology of the whole district, which comprises an area of about 4,000 sq. miles, in the counties of Berthier, Joliette, Maskinongé, Montcalm, Argenteuil and L'Assomption, has now been worked out and it is hoped that the map will be ready this spring. Speaking generally it will extend from Berthier in the east to Trembling mountain on the west, and from Cypress lake on the north to Lachute on the south.

"The area examined is occupied for the most part by rocks of Laurentian age, which to the south-east are unconformably overlain by Cambrian or Cambro-Silurian strata. The Laurentian rocks consist of gneiss in great variety, interstratified with beds of quartzite, amphibolite and crystalline limestone. In the eastern part of the area these strata lie nearly flat, but to the west they become more and more sharply folded. Sometimes interstratified with these and sometimes intruded through them are a number of masses of gabbro or norite rich in plagioclase (anorthosite). These, together with some of the associated gneisses and limestones, were formerly supposed to constitute a separate overlying series, to which the name Upper Laurentian was given. Their boundaries have, however, now been traced out, and their stratigraphical relations determined and they have been found to be without doubt igneous rocks, while the associated gneisses and limestones form part of the ordinary Laurentian complex. The 'Upper Laurentian,' therefore, in this typical area does not exist. In addition to these basic igneous rocks, masses of eruptive granite and other acid rocks occur in several parts of the district."



Mr. Giroux was requested to go over and revise the boundaries of the Palæozoic formations north-west of the St. Lawrence, on the south border of the Three Rivers sheet and the adjoining north border of the Montreal sheet of the Eastern Townships map in the counties of L'Assomption, Berthier and Maskinongé. On this work Mr. Giroux reports as follows:—

"I left Ottawa on the 15th of July, but owing to some difficulty I had in getting good canoe men I could not begin work before the 25th of July, on which day a micrometer survey of the L'Assomption river was begun from the dam, a short distance above the old saw mill of the town of Joliette. This river is very crooked and affords very good exposures of highly fossiliferous brownish weathering calcareous sandy rock or impure limestone full of grains of quartz. The strata are nearly horizontal. Ledges of these rocks crop out here and there, in ascending the river, for a distance of about a mile and a quarter, where there are exposures of brownish weathering coarse whitish grey sandstone (Potsdam). The beds are disturbed and the rock is very much decomposed for three or four inches from the surface. At Bordeleau's mill, two small excavations had been made where the rock contains small bunches and strings of iron pyrites. The beds dip S. 60° E. < 12°. These sandstones extend as far up as Rapide à Nadeau, or about 19 miles, by the river, in a northerly direction from the town of Joliette. At the foot of this rapid there are ledges of coarse crystalline hornblende gneiss which soon changes into a more quartzose grey gneiss. About one-third of a mile further up the river two farmers spent all their money digging for gold in patches of calcite which they mistook for quartz. The small scales of mica, the fine fragments of hornblende, and a few crystals of iron pyrites which shine in the rock are probably what led these men astray.

"We ascended the river to the mouth of Black river, and in all that distance, about 40 miles, the Laurentian rocks are well exposed; they consist of gneisses which vary greatly in composition, being at times very micaceous, then hornblendic, and then again very highly quartzose and garnetiferous. As a rule the foliation is very indistinct, and it is only in very few places that the dip which varies in direction and from an angle of 27° to 37° degrees could be observed. The banks of the river are very irregular in height, varying from 25 to about 125 feet, and are composed of fine and coarse sand, with bands of small pebbles which are always underlain by bluish grey clay. In some places, however, the banks are all clay. As a rule rock exposures can be seen at rapids only; but as these are numerous a good section is afforded. All along Black river from its mouth up to Black lake, a distance of seven miles, there are fine exposures of various gneisses. In some places it presents a mottled appearance due to patches of almost pure quartz, and others of hornblende and mica. In places the rock shows specks of graphite and iron rust. The predominating colour of these gneisses is brownish grey, weathering grey and having a general strike of N. 30° E. to N. 30° W.

"Black lake measures about six miles around and has low shores which are even swampy in places. In the bottom of the largest bay known by the name of 'Monatac bay,' an old Indian by the name of Monatac settled about 60 years ago and reported that he had a gold mine near his shanty which was generally believed. Even now, many persons in the district firmly believe that there must be a great deposit of gold there. I examined the spot and found ledges of grey gneiss containing yellowish brown mica, the old Indian's gold! We then ascended Black river as far up as range line XII–XIII of the township of Brandon. Thence, we portaged across to Lake Matambin which we surveyed, and then descended the river Matambin to Lake Maskinongé. Around Lake Matambin are ledges of brownish grey gneiss and grey mottled yellowish quartzite, micaceous where the banding is distinct.

"Matambin river is very crooked and is of very little geological interest, as it shows only one small exposure of dark hornblendic gneiss from its head to its mouth.

"At the south-eastern end of Lake Maskinongé there are exposures of about 300 feet wide of a fine-grained reddish gneiss, much broken, reddish weathering and cut in different directions by irregular veins of reddish coarsely crystalline quartz-felspar and chlorite rock. More exposures of brownish grey and grey very highly quartzose gneisses can be seen on

the west shore of the lake from about a mile and a-half south of Matambin river; the foliation is very indistinct, but in some places it was distinct enough to determine the strike as S.  $31^{\circ}$  E. with easterly dip. About a quarter of a mile from these gneisses are ledges of a reddish brown, fine-grained, compact, highly felspathic rock. This extends to a cliff of about 150 feet high and about 700 feet long, composed of much twisted and mixed quartzose felspathic hornblendic and micaceous gneisses. These and the above described rocks are the only ones seen on Lake Maskinongé, the shore of the northern part being low and sandy, and the rest of the southern shore covered with boulders.

"The survey and examination of Lake Maskinongé being completed, we ascended the Mastigouche river for a distance of fourteen miles. We then made a portage across the mountains to Lac à la Chute, two miles and a-half north-north-west. From the mouth of the river up to the portage there are many ledges of various kinds of gneiss to be seen dipping approximately S.  $35^{\circ}$  E.  $< 25^{\circ}$ . About a quarter of a mile from the mouth of this river there is a small exposure of a greyish quartzose calcareous rock, containing much white calcite in places and full of iron pyrites and rounded grains of a light green mineral (pyroxene.) Hills of gravel and sand, 10 to 60 feet high, occur in places along this distance. Mastigouche river is very rough from the portage road above mentioned to Lac à la Chute. There are nine falls one after the other in this short distance. All the rocks are varieties of gneiss. Traces of magnetic iron ore occur in places, and in others large crystals of brittle black mica. The Mastigouche river was surveyed for about 20 miles north of Lac à la Chute before taking an easterly direction through a chain of small lakes which led us to two lakes, one being the head of the east branch of the Mastigouche, and the other the head of the west branch of the river Du Loup. These two lakes are separated by a band of gneiss only about 25 feet wide, and therefore the watershed portage was easily crossed. The country comprised between Lac à la Chute and 'Lac Sans Bout,' which is a few miles south of 'Lac au Sorcier,' is very poor both in timber and soil. The land is swampy and stony; scrubby spruce growing on rocks covered with very little decomposed vegetable matter and wet moss-covered surface gives the country a very uninviting appearance. From 'Lac Sans Bout,' which is about six miles long, we proceeded to 'Lac au Sorcier,' and then down the river Du Loup, which was surveyed to its mouth. The timber in the neighbourhood of the two last mentioned lakes consist of spruce, tamarack, a few pines and scrub cedars, and is the best seen on all our route. The river Du Loup is very rough, and its bed is generally covered with immense blocks and boulders of gneiss. Good exposures of gneiss are often met with, and the rapids and falls there are on this stream from its head to a few miles below Hunterstown are too numerous to detail. At about 22 miles south of 'Lac au Sorcier' there are very fine exposures of grey gneiss, showing a much contorted banding, but with a general dip of S.  $20^{\circ}$  E.  $< 20^{\circ}$ . At Hunterstown there is a band of whitish grey micaceous limestone, about five feet wide, interstratified with the gneiss. No ledges of rocks newer than Laurentian can be seen on the river Du Loup. Fossils were collected from the following places: Chicot river, north of St. Cuthbert, Fafard's quarry, Defond's quarry and McGee's quarry, all close to one another, in the parish of St. Cuthbert, from Barrette's quarry in the parish of St. Barthélemi, Gagnon's quarry in the parish of St. Justin, and from many other places.

"The Canadian Pacific branch railway, from Joliette to St. Gabriel de Brandon, was surveyed, and also many roads, so as to fix the boundary of the Palæozoic rocks and define as well as possible the different formations of the Cambro-Silurian, but the country being so much drift-covered, it is very hard if not impossible to do so accurately.

"A pretty good deposit of bog iron ore was observed in the county of Joliette, along the railway. The Canada Iron Furnace Co., of Radnor, began to work this deposit last July, and their foreman informed me in September, 1891, that he thought he would be able to ship about 200 car loads of the ore to the blast furnace in Radnor by the fall.

"Prospecting for gold in the Laurentian system, in the county of Joliette, has been going on for years, and there was quite an excitement created in the town of Joliette last summer about a gold mine having been discovered along the Brassard or Mattawin



road at a place called 'La Barrière,' in the unsurveyed portion of the township of Courcelles. This place was opened and worked by a company styled: 'Compagnie des mines d'or de Mattawin.' In the report of the Commissioner of Crown Lands of the Province of Quebec for the year 1890, Mr. Obalski, the Government mining engineer, speaking of it says:

"From the latter property, several samples taken by myself in a small vein a few inches wide, were assayed by Messrs. Ladoux & Co., New York assayers, and while two of the samples gave no traces of gold, a third gave the following result:—

Gold, 1.83 oz. per ton of 2,000 pounds.

Silver, 2.65 oz. do

"I collected samples from the mine and Mr. Obalski was kind enough to give me some of the quartz of which Messrs. Ladoux & Co. report so favourably, and these samples were given to Mr. Hoffmann, chemist to the Geological Survey, to analyze and were found by him to contain only a trace of gold and no silver.

"I returned to Ottawa on the 6th of November, having during the season surveyed 315 miles of rivers, lakes and roads, viz., 215 miles of rivers and lakes by micrometer and 100 miles of roads by pacing. Expenditure for the season, \$806."

Professor Laflamme was requested to make an examination of certain portions of the north-west shore of the St. Lawrence, between Malbaie and Tadousac with a view to revise and complete the delineation of the geological formations in that district. On this work Professor Laflamme reports as follows:—

"The Cambro-Silurian formations, so often seen in contact with the Archæan rocks along this coast, are generally extremely contorted. There are nearly everywhere traces of displacements and overturnings, in which respect they differ widely from the same formations as found in the neighbourhood of Quebec and Lake St. John.

"It seems to me that these perturbations, the complicated positions of the beds, the numerous fractures met with on all sides, might well have something to do with the slight earthquakes which occur generally several times in a year in this part of the country.

"From statistics which I have collected on the spot, these seismic phenomena have at present a tendency to diminish in intensity and violence. Yet it is quite probable that the maximums may recur from time to time, at intervals, which it is almost impossible to determine precisely.

"Observations on the earthquakes, as gathered from the inhabitants, are too divergent and contradictory to give any assistance in locating the centre or centres of disturbances.

"The only mineral of economic importance met with during the exploration is limestone. It is used for lime and for building stone. I have already mentioned in my last year's report the sandstone of Malbaie, which furnishes excellent building material.

"The limestone which occurs as a band of greater or less width along the coast disappears completely two or three miles below Malbaie. Thence to Tadousac, nothing but steep banks of Laurentian granite are met with. The general aspect of the country is absolutely the same as along the Saguenay shore, and the mineral composition of the rocks in both places is identical.

"At the request of a number of persons I have examined certain deposits of minerals which were thought to be of value. Unfortunately, none of them realized the hopes conceived of them."

Mr. Low, assisted by Messrs. H. Y. Russel, B.A.Sc., A. A. Cole, B.A., and J. B. de Boucherville, B.A., was engaged during the past summer in working out the geology, and in correcting and extending the topography of that part of the N.W. $\frac{1}{4}$  sheet of the Eastern Townships map between its eastern boundary and the St. Maurice river, comprising the southern portions of the counties of Champlain and Portneuf.



Mr. Low left Ottawa on the 9th of June, and was joined in Quebec by Mr. Russel, where a few days were spent tracing plans in the Crown Lands office and in examining the rock sections on the north side of the city. The boundary of the anorthosite area which extends eastward from behind Chateau Richer to beyond Ste. Anne de Beaupré, was traced to the limits of the N.E. sheet of the map. Men having been engaged the party proceeded to Rivière à Pierre station on the Quebec and Lake St. John railway, and there separated, one party, under Mr. Russel, to make pace surveys of the roads already mapped and chain surveys of new roads; and the other party, consisting of Mr. Low and two canoeemen, to examine the rocks along the principal water courses.

The Batiscan river was first descended from Laurentides station to its mouth. The rock exposures along the river are numerous to within three miles of Ste. Geneviève where the country becomes low, and the river banks are cut out of deposits of stratified clay and sand.

Along the upper part of the river the rocks are tilted at high angles, and are much contorted both on dip and strike; but throughout the part below Notre Dame des Anges the dips are quite moderate and are almost always towards the east. At Notre Dame a large area of massive quartzite is seen, having a breadth of over one thousand yards; this passes gradually into a light coloured quartzose mica gneiss on both sides. Quartz veins penetrate the quartzite and hold large crystals of a light coloured mica, along with black tourmaline and hornblende. A small crystal of apatite was also found here. Some of the mica is large enough to be of commercial value, but is often considerably crumpled. The St. Maurice river was next examined from the Grandes Piles to its mouth. The rocks here were found to be like those of the lower part of the Batiscan river inclined at low angles towards the east. The gneisses have a more basic character than those to the eastward, and in many places ilmenite or titanite iron ore is a constituent mineral. This is generally found in small grains disseminated through the rock, but at times is found in larger masses, chiefly in pegmatite veins. White and red crystalline limestone occurs in small bands or veins in several places near the Petites Piles; it is rendered impure by a large mixture of green pyroxene and yellow mica.

The next exploration was from Lake Edward to the St. Maurice river, coming out on that stream at La Tuque. This journey was made by an old overgrown portage route which leaves Lake Edward on its west side, opposite the Grand Island and passing through five small lakes on the headwaters of the Petite Vermillon river and five others on the Petite Bostonnais river into Little Wayagamack lake, and thence by Lake Wayagamack and the latter river into the St. Maurice, some three miles below La Tuque. The Wayagamack lakes are fine bodies of water, the smaller having a shore line of nine miles, the larger of twenty-six miles; both lakes are surrounded by fine wooded hills, and their clear water is full of large trout.

From La Tuque, the St. Maurice river was descended to the Grandes Piles; numerous bands of white crystalline limestone were noted at different points along the river occurring in a basic ferruginous gneiss. The largest mass of this limestone is found in the second range in the township of Polette, two miles inland from the river; here the exposures show a development of white limestone over four hundred yards wide which is said to extend inland some three miles further. Much of this limestone is fine-grained and free from impurities, while the remainder is coarser grained and holds reddish mica, green pyroxene and traces of graphite. Crystals of mica are said to have been found here, but no specimens of it that would be of economic value were seen.

On a point about one mile above the mouth of the Mattawin river is a large vein of dark red pegmatite holding masses of magnetite, the only known locality in this region of such ore free from titanite.

The next canoe trip was taken through lakes Long and Mekinac, the last being a fine body of water some fourteen miles long with perpendicular cliffs on the east side, rising in places six hundred feet above the lake. Its water is clear and very deep, as a chance sounding gave two hundred and sixty-five feet. The cliff on the east side gives an almost uninterrupted section, which shows the gneisses to be arranged in a series of

folds, with high dips to the westward and low ones towards the east. A few small veins of crystalline limestone were seen near the axes of the anticlinals. The discharge of Lake Mekinac was followed to its discharge into the St. Maurice river. On the north side of the Mekinac river and along a tributary flowing out of Trout lake, large masses of iron ore have been found in a dark greenish red gneiss composed chiefly of orthoclase and epidote, but as all the ore yet found contains a large percentage of titanitic acid it is practically of no value. Similar ore is found in a large quartz vein, on the west side of the St. Maurice river, about seven miles above the Grandes Piles and near Lake Bouchard, in the Seigniorship of Radnor, also in the township of Shawenegan, and about the lakes of the Laurentide Fishing Club. In the vein at Lake Bouchard a small mass of apatite was found associated with the iron, mica and pyroxene.

On the 6th of August the road surveys having been completed, that party was disbanded, Messrs. Cole and Boucherville returning home and Mr. Russel joining in the canoe work.

The Black river was explored from the crossing of the Quebec and Lake St. John railway as far as its junction with the Ste. Anne river, and then a trip was made from Lake Edward to Lake Batiscan by way of the Lac des Passes route, the return journey being down the Eclair river, the discharge of Lake Batiscan.

The rock sections along the new line of railway from Rivière à Pierre to St. Tite junction were next examined and were followed by a canoe trip through lakes Long Masketsy and Roberge to the headwaters of the Eaux Mortes river, which was descended to Lake Mekinac; thence a portage route was followed through Trout, Sleigh, Castor and Batiscan lakes to the St. Maurice. The remainder of the season was taken up visiting the mineral localities of the region and in a short trip up the Jacques Cartier river for a more detailed examination of some of the rocks exposed in the adjacent country.

At Lac Tortue the Canada Iron Furnace Company have lowered the water of the lake some four feet, and as the lake is very shallow with slightly sloping banks, a large area is laid bare around its edge, and here the bog-iron ore which has been formed in the lake as flat concretions is washed out of the surface mud with hand sieves, while the ore in the deeper part of the lake is raised by a dredge which carries three rows of buckets on an endless belt.

Apart from Lac Tortue, in all the flat country about Three Rivers on both sides of the St. Lawrence, bog-iron ore is found in patches which vary from three to eighteen inches in thickness. The ore is gathered by the farmers from their lands, and brought in and sold at the furnace. As iron smelting has been in operation about Three Rivers since 1737 the supply of ore in the vicinity is somewhat exhausted, but new supplies of great extent have been found about Gentilly, opposite Three Rivers, and along the Joliette branch of the Canadian Pacific railway, so that enough ore will be forthcoming to run the new furnace at Radnor which will have a capacity of thirty to fifty tons a day, smelting magnetite from St. Jérôme along with the bog ore.

Ochre is a common mineral in this part of the province and is at present worked in two localities at St. Malo, eight miles from Three Rivers, and at St. Tite junction on the Piles Branch railway.

At St. Malo the deposit has been proven across twenty-two lots and in width from one hundred to three hundred yards, with a depth from one to twenty feet. At St. Tite junction the ochre occurs in two gulleys which join, and run into the St. Maurice; the ore has been proven along both gulleys for nearly half a mile and has everywhere a considerable thickness.

The St. Maurice Metallic Paint Co. and the Johnson Paint Co. have furnaces for burning the ore at St. Malo, the former grinding the burnt material at Cap Magdeleine near Three Rivers, the latter at Montreal. At St. Tite junction a furnace and grinding mill are in course of erection by the Radnor Paint Co. During the summer upwards of five hundred and fifty miles of canoe exploration was accomplished in the northern portion of this region, together with eighteen miles of chained and four hundred and eighty-three miles of paced survey along the roads of the settled southern area. Total cost of the exploration \$1,414.06.



Mr. Robert Chalmers left Ottawa on the 6th June for New Brunswick with instructions to continue the detailed survey and mapping of the superficial deposits in the counties of Westmoreland, Kent, Albert and Northumberland, and the investigation of the glacial phenomena connected with these deposits. The following is his report on the progress of this work:—

“The maritime parts of this area have now been pretty thoroughly studied. But the district drained by the south-west Miramichi river requires further exploration, especially that portion lying to the west of the main river, and another season's work will be necessary to complete the whole.

“A great part of the area examined is level or slightly undulating, but in Albert county it is hilly and broken. Around the head of the Bay of Fundy the surface is diversified by ridges which attain a height of from 200 to 400 feet. Between these, tongues of salt marsh extend up the valleys. These marshes are a characteristic feature of the scenery.

“The surface geology of this part of New Brunswick is of profound interest: and the glaciation of the isthmus of Chignecto, in its relation to that of the mainland of New Brunswick and of Nova Scotia, is of special importance. The facts when studied in detail will, in my judgment, show the action of floating as well as of land-ice. On the site of the marine railway, now under construction across the isthmus, and along the New Brunswick and Prince Edward Island railway, the exposed ledges exhibit striae varying from S. to S. 50° W. (true meridian). These have been produced by ice moving across the isthmus from the north-east. And as no high land exists in that direction nearer than Labrador or Newfoundland, the hypothesis of their having been caused by floating ice during the Pleistocene subsidence of the land here seems a reasonable one. This view is supported by the facts respecting the glaciation of the higher grounds on both sides of the isthmus. In Eastern Albert and in Westmoreland and Kent counties, N.B., the striae indicate ice movements directly towards the Bay of Fundy and Strait of Northumberland, while in Cumberland county, N.S., the land-ice appears to have moved down the slopes westwardly towards the open Bay of Fundy, or Pleistocene sea, then forming a strait between New Brunswick and Nova Scotia. On the whole, the district is one offering special advantages for the study of the relative movements of land and floating ice.

“An increased interest was given to the study of glacial phenomena and Pleistocene changes of level by the visit in October of Baron G. de Geer, a member of the Geological Survey of Sweden, who is actively engaged in similar investigations for that survey. He made special investigations in New Brunswick respecting the height of the Pleistocene shore line, or, as he terms it in Scandinavia, the ‘marine limit,’ and by independent measurements made at St. John, Moncton, Bathurst and Dalhousie junction he found that this limit of the marine beds, as laid down by me, is approximately correct. The hypothesis that the Pleistocene upheaval was greater in New Brunswick than in Nova Scotia was sustained by observations made by Mr. Wilson and myself later on. East of Nappan River, N.S., we discovered a well-defined shore line 135 feet above high tide level and traced it upwards of four miles. The importance of this Pleistocene ‘marine limit’ lies in the fact that when the land was at this level (*viz.*, 225 feet at Moncton, N.B., and 135 feet at Nappan, N.S., lower than it is at the present day), the Bay of Fundy would be connected with the Straits of Northumberland, and, consequently, those parts of the isthmus of Chignecto on which striae are found would be submerged to a depth sufficient to allow floating ice to pass over them.

“A discovery of some importance made by Mr. Wilson was that of marine fossils in the boulder-clay at Negrotown Point, St. John Harbour. The deposit was also examined by Baron de Geer and myself.

“The recent and stratified deposits of Westmoreland and Albert counties are varied and interesting, and those of tidal origin, *viz.*, the salt marshes, are unique. These marshes comprise, in Westmoreland and Albert counties alone, an area of 35,000 acres, and have long been noted for their fertility. Of late years, however, they have deteriorated. This remark applies more especially to those portions which have been



dyked and cropped continuously for a century or more, without the application of any fertilizing material to the soil, which has, in consequence, become deficient in plant-food. Lime and wood ashes have been recommended; but improving them in this way is slow and expensive. A scheme inaugurated by the more intelligent farmers of Sackville would, if systematically carried out, be more effective and economical, viz., the cutting away of portions of the dykes and aboideaux and flooding the marshes with the tidal waters of the Tantramar and other rivers, which flow through them. The tides, which rise high enough to overflow these marshes, if the dykes were broken, carry in red mud and deposit it on their surface. This is an admirable fertilizer, its efficiency having been abundantly proved by the experience of the Sackville farmers. This system of improving them will probably be adopted by all the owners of exhausted marsh lands around the Bay of Fundy. It seems the natural method of restoring them, partially at least, to their original fertility.

"The depth of the marsh mud is variable, but increases seaward. Immediately underlying it is a layer of fossiliferous blue clay, which rests on a peat or forest bed. At Aulac, Intercolonial railway, the latter attains a thickness of 20 feet, and is overlain by 80 feet of marsh mud. These marsh and peat beds indicate, therefore, a subsidence of the land here within the recent period of about 80 feet. Intelligent observers inform me that the peat or forest bed is continuous or nearly so, throughout, underlying the salt marshes everywhere.

"In reference to the soil on the higher grounds, it may be stated that the eastern part of Westmoreland county comprises some of the best agricultural lands in the province. Along the Petitcodiac river there are also fine farming tracts. On the Millstone Grit area, however, the soils are deficient in lime, and would be much benefited by frequent applications of it.

"In Westmoreland county, the forest growth is recent, except in a few limited areas. The more extensively wooded portions of Albert and Kent counties are, however, covered by the original forest, which still contains large spruce, hemlock and hardwood trees. In the last-mentioned county, forest fires are rapidly destroying the timber tracts.

"The materials of economic importance found in the surface deposits of the district examined may now be briefly referred to.

"Bog-manganese occurs in Albert county, near the Dawson settlement. On a branch of Meldona creek, an extensive bed of it has been opened up, and a branch of the Albert railway constructed to it. Kilns for drying the material have also been erected. This deposit covers about 25 acres of ground, and appears to be quite thick—in one opening the thickness being 26 feet. The ore is a loose amorphous mass, which can readily be shovelled up, and contains, in layers and patches, a considerable percentage of bog-iron ore, or red ochre. Indeed, very little of the material appears to be wholly free from iron, though large portions have merely a trace of it. The deposit lies at the foot of a hill, and its accumulation there appears to be due to springs. These are still running down the hillside, and, doubtless, the process of producing bog-manganese is still going on. Operations have temporarily ceased at this mine. Indications of other and similar beds of bog-manganese have been met with at the base of this hill further west.

"Bog-iron ore was found on the south side of Buctouche Harbour, Kent county, occupying an area of several acres. Where openings were made in two places, the deposit showed a thickness of from 12 to 15 inches.

"Just south of Richibucto Head, another deposit of this material was observed, but its extent and thickness was not ascertained. Bog-iron ore was also noticed on the south side of the mouth of Kouchibouguac river by Mr. Wilson, and in a number of other places. No use has yet been made of it.

"Peat bogs occur at Richibucto Head inside of the sand beaches, also along the Kent Northern railway above Kingston. Two bogs were seen along the Intercolonial railway between Berey's Mills and Canaan stations. Smaller peat bogs were noted on the isthmus of Chignecto, and in numerous other places.

"Brick kilns are in operation at Lewisville, near Moncton, and at Folly Point, Westmoreland county, deposits of brick clay are common in many parts of the district.

"Gravel pits have been opened at Albert, on the Albert railway: at Memramcook (gold is reported to have been found in the latter); at Westmoreland Ridge, near Aulac, and on the Kent Northern railway, near Mill Creek, gravel and sand deposits are quite abundant in the district.

"My assistants during the season were Messrs. W. J. Wilson and W. D. Matthew, of St. John, N.B. Mr. Wilson, who has assisted me during part of four seasons, was in the field from the 1st of July to the 15th of August, and from the 14th of October to the close of field work, on the 20th November. Mr. Matthews was with me from the 15th of June to the 24th of July. Both these gentlemen performed their duties in every respect most satisfactorily. Mr. Wilson and I reached Ottawa on the 2nd of December, and he is now assisting in the preparation of the maps for publication."

The cost of the season's work, including the salaries of Messrs. Matthew and Wilson, to the 15th of August, is \$957.02.

Mr. Fletcher was instructed to continue the work of previous years in Nova Scotia. He left Ottawa for the field on the 17th of June and returned on the 15th of December. He was again assisted, during the entire season, by Messrs. M. H. McLeod and D. I. V. Eaton, and during several months by Professor Coldwell and Messrs. W. B. Almon and F. A. Coldwell.

Mr. Eaton, who was for some days employed in tracing and reducing plans in the office of the Iron Company at Londonderry, and in the Crown Lands Office at Halifax, did not reach Ottawa until the 24th of December.

Mr. Fletcher's summary of the season's field work is as follows:—

"The observations and surveys during 1891 were chiefly in the counties of Colchester and Cumberland, in the districts of Onslow, Londonderry, Economy and Parrsboro', north of Cobequid bay and Minas basin, comprising an area of about 500 square miles.

"The head of Cobequid bay presents many thousand acres of dyked marshes under excellent cultivation and the upland also is fertile. Numerous thriving, pretty villages dot the low shore as far as Economy, below which the scenery is strikingly wild and picturesque, and the coast is well known to collectors for the abundance and beauty of the rare minerals found in its trap formation, no part of the world except the trap district of India being, according to Professor Marsh, richer in zeolites than the shores of the Bay of Fundy. The mountains are for the most part under forest except in small settlements or where tracts have been cleared in the neighbourhood of the Londonderry mines to furnish charcoal for iron smelting.

"The geological formations are the extension of those described in the Summary Reports for 1889 and 1890, comprising Triassic, Carboniferous limestone, Devonian and igneous rocks; and the additional evidence collected greatly strengthens the views expressed in those reports regarding their relations to one another.

"Red, soft, crumbly Triassic sandstone fringes most of the shore as far as Five islands, below which it is only in small patches where protected from the fury of the tides—which rise to a height of 50 or 60 feet, with currents running eight miles an hour—by imposing precipitous capes and islands of basalt and amygdaloid built up in fine symmetrical columns or worn into deep caverns, pointed arches and lofty pinnacles.

"The Carboniferous limestone appears in the rivers or on the shore at several points between the head of Cobequid bay and Economy. From Swan creek to the mouth of Parrsboro' river it rests in small patches upon Devonian rocks and the unconformity of these two series is well displayed: the former having the usual association of dark grey and red soft marl, sandstone and conglomerate with gypsum and fossiliferous limestone, while the latter consist of crumpled slates and quartzites, cut by igneous dykes, and by veins of limonite, ankerite, quartz, &c., but full of fossil plants and *Naiadites*. From another unconformable contact immediately west of Partridge Island, the Carboniferous limestone rocks occupy most of the shore as far as Port Greville, presenting remarkably



fine illustrations of contorted and faulted strata, some of which have been greatly disturbed without affecting the beds above and below. Among these is a band of coaly bituminous shale, two feet thick, full of fossil plants, Crustaceans and *Nauidites*. Another belt of this formation extends from Phinney's brook to Spencer's island.

"The Carboniferous limestones have been quarried near Partridge island and at Clarke's Head. At another quarry at Kirkhill, two miles and a half north-west from Parrsboro', a dark grey flaggy limestone, in a nearly vertical attitude, includes lenticular layers of coal, one of which is said to attain a thickness of two feet at the bottom of a shaft 75 feet deep. The coal ignites readily, burns with a bright flame, leaving a light porous coke which yields a quantity of whitish or reddish calcareous ash. Another deposit of from two to four feet of slaty coal at Brookville was examined in 1878 by Mr. Scott Barlow. It has been opened by several pits in De Wolf brook, a short distance up stream, in a conglomerate composed of pebbles of the slates and quartzites of the adjoining brooks and of the shore, interstratified with layers of soft argillaceous shale fit for whetstones and whitish quartzose sandstone. Other unimportant discoveries of coal have been made in the East River of Five islands, Great Village river and other streams.

"The Devonian rocks are precisely like those of Riversdale, Union, Stewiacke and the coast of Hants county, described in the Summary Report for 1890. Sir Charles Lyell in 1843, while including the beds on the Shubenacadie river with the Carboniferous limestone formation, states that in five cases where Sir J. W. Dawson and he traced the junction, they found it to be a line of fault, and at the point of contact one face of the fault was in every case formed of gypsum. He further states that this is not in a rent or fissure, but seems to belong to the stratification which is nearly flat. In the Cobequid Hills, and also at some points on the shore, the Devonian rocks are intersected by masses of syenite and diorite. They come from beneath the Lower Carboniferous, on the shore between Moose creek and Partridge island, and again between Port Greville and Phinney's brook, where they are associated with a mass of crystalline limestone, apparently a vein. The iron ores of Londonderry—which give employment to 150 miners, and yield annually about 40,000 tons of ore—of Portapique and North rivers, of Birch Hill and other places, are also in these rocks as well as the veins of quartz, baryta, limestone and dolomite of Londonderry, Five islands and Phinney's brook; while the asbestos (fibrous hornblende) of Lynn and Harrington river, and the altered diorites or serpentine, and the felsites of New Prospect occur among the associated igneous rocks.

"In addition to the fossils mentioned last year as having been obtained from the Economy river, in the neighbourhood of the gold (?) mine of Peleg brook, numerous stipes of ferns resembling, according to Sir J. W. Dawson, *Aneimites acadica* of the Lower Carboniferous, were found among the dark slates of Murphy brook.

"The newer or Triassic series of igneous rocks has attracted attention from all who have visited this district, and many of the contacts with the Triassic sandstone and other rocks have been minutely described. Along the line of junction the two are intimately mixed and angular masses of both are cemented into a sort of breccia passing into amygdaloid with cavities filled with zeolites. The amygdaloid contains magnetic iron ore in masses and veins one foot wide and under, exceedingly irregular in their course, and often terminating abruptly, so that little dependence can be placed upon them for mining, although the ore is very rich. Of this nature are the iron ore deposits of Gerrish Mountain, Cape Sharp and Cape d'Or. Native copper and ores of this metal and traces of manganese ores are also found in the trap. Collections of its characteristic minerals may be made from veins, nodules and geodes at Five islands, Two islands, Wasson's Bluff, Partridge island, Cape Sharp, Spencer's island, Cape d'Or and other places. The minerals referred to comprise amethyst of great beauty and brilliancy, moss and fortification agates of rich colours and varied surface, red and yellow jasper, pure white chalcedony of very fine texture and smooth surface, well adapted for cameos and other ornaments, and sometimes curiously zoned or marked with stripes of different shades of colour; calcspar in rhombohedrons or of the



dogtooth variety ; zeolites, including stilbite, henlandite, analcime, laumonite, thomsonite, chabazite and other species in beautiful crystalline aggregations or in perfect distinct crystals. Asbestos in small seams is found at Blue Sack.

"At the mouth of Fox river is a bank of fine sand, and great accumulations of drift sand, gravel and clay occur in this region."

The expenditure on the season's explorations, including the salaries of all assistants, was \$1,430.66.

Mr. Faribault continued and made good progress with the very excellent detailed work he is doing in mapping the structure of the gold-bearing rocks on the Atlantic coast of Nova Scotia and on which he furnishes the following report and interesting remarks. Personal observation enables me to concur in the opinion he expresses both as regards the correspondence of the Quebec gold-bearing rocks with those of Nova Scotia, and also as regards the position of the rich leads and their relation to axial folds. The latter, if correct, must prove of the greatest practical importance if intelligently applied in the further development of gold mining in Nova Scotia and also in directing prospecting for veins in the alluvial fields in Quebec.

"On the way to Nova Scotia, I took occasion to visit the Little Ditton gold district in the Eastern Townships of Quebec, with the view of comparing the Lower Cambrian rocks there with the auriferous series of Nova Scotia. Like all those who have examined both localities, I have no doubt that these auriferous rocks are of the same age. The Little Ditton rocks like those of Nova Scotia may be divided into two distinct groups, a lower or quartzite group and an upper or graphitic ferruginous slate group. They present the same lithological character as the two groups in Nova Scotia, and there are good reasons to believe that the gold of the Ditton alluvial deposits is derived, as in Nova Scotia, from numerous quartz veins which run along the sharp anticlinal axes into which these rocks have been folded. Although a great deal may be expected of the deep deposits of the old rivers which have not yet been worked, the future of the gold mining industry in Quebec must as elsewhere lie in the working of the solid veinstone.

"The section surveyed this season in Nova Scotia lies westward of that surveyed in 1889 and 1890, and extends along the sea shore from Porter's lake to Halifax harbour, and northerly to the Shubenacadie and St. Andrew's rivers, covering an area of 305 squares miles in Halifax county and 70 squares miles in Colchester county. Besides this, Mr. Eaton surveyed 130 miles of roads in Hants county to be used as tie-lines in next year's contemplated work.

"The greater part of the region is occupied by the auriferous Lower Cambrian rocks cut by the western end of the belt of granite examined last year which extends to within two miles east of Waverley, and also by a small granite mass three miles north of Waverley. In the northern portion, the gold-bearing rocks are overlain by the Lower Carboniferous formation along the valleys of the Shubenacadie, Gay's and St. Andrew's rivers and a few of their tributaries.

"Two or three beds of dolomitic limestone from six inches to four feet thick were found at various places at the bottom of the upper graphitic ferruginous slate group, between layers of greenish talcose slate. These beds may contain fossils, but search made for them has so far proved unsuccessful.

"The anticlinal axes were minutely examined and traced, as in former years, on account of their close relation to the auriferous belts. Within the region examined, the geological structure of the gold district of Lawrencetown, Montague, Waverley and Oldham was carefully studied. Lawrencetown has been but little worked. The yield of the three other districts has been as follows :—

DISTRICTS.	Yield for 1890.	Total Yield from 1862 to 1891.
Montague .....	2,263	32,581
Oldham .....	2,775	41,242
Waverley .....	403	53,874
Total in Nova Scotia.....	24,358	506,675

"Special attention was given to the gold district of Oldham, it being a typical district, worked to a great extent and exposing to great advantage the quartz leads, all of which were prospected by means of surface trenches on account of the small thickness of the drift. A detailed geological map of this district, on a scale of 500 feet to one inch, with sections, was compiled on the ground. It shows the elliptical structure of the anticlinal fold, with all the known quartz veins, both interbedded and transverse; and also the numerous faults affecting them, and proves clearly that the richness of a lead depends altogether on its position and relation to the structure of the elliptical dome of the fold to which it owes its origin. In this work I am specially indebted to Mr. J. E. Hardman, B.Sc., M.E., manager of gold-mining properties in Oldham and Waverley, for much valuable information which his great experience in gold-mining enabled him to give.

"Auriferous leads have also been prospected at Elmsdale, South East Passage, and other places along anticlinal axes; and traces of antimony ore are reported to have been found at Wyse's Corner.

"Some facts which have an important bearing upon the question of deep mining, may here be introduced, in view of the great interest taken at present by the mining community in the subject. From a study of the districts east of Halifax, and especially of that of Oldham, it is plain that whenever an interbedded lead is followed some distance on the surface or to great depths, its relation to the axis of the anticlinal, and consequently to the stratigraphy of the fold, is constantly changing, and its size and workable value must consequently be affected; so that it is improbable that a lead found rich and of good size on the surface can be followed profitably to great depths. The limit of depth may vary from a few feet to 400 or 800 feet according to the structure of the anticlinal fold, the position of the lead and the extent to which it has been denuded. The problem of deep mining seems thus to depend on the location of a zone of rocks containing the parts of the leads which are of sufficient richness, because they keep the same relative position to the axis of the anticlinal. In most of the districts the zone of rich leads has the anticlinal axis for its centre, and it is probably the centre of the auriferous zone to a depth practically unlimited. Such is the case in the eastern part of the province, at Seal Harbour, Isaac's Harbour, Goldenville, Harrigan Cove, Salmon River, Fifteen Mile Stream, Killag, Mooseland, Moose River, Caribou, Gold River, Lawrencetown, Waverley and Oldham. In the few other districts where the auriferous zone is worked only on the north or south side of the anticlinal, the zone would, for the same reason, be parallel to the axis of the anticlinal to an inaccessible depth, as in Isaac's Harbour, Wine Harbour, Beaver Dam, Tangier and Lake Catcha.

"I would, therefore, strongly recommend that deep perpendicular shafts be sunk on the anticlinals, and that cross-cuts be driven on both sides at various depths to test leads which do not crop out to the surface, many of which would probably prove very rich, as they would be cut in their most favourable stratigraphical position and could easily be worked by means of levels and overhead stoping from the cross-cuts and the one perpendicular shaft. This system might be adopted with advantage at the North Star property of Isaac's Harbour, at Goldenville, where both sides of the anticlinal have been worked from 500 to 600 feet deep and abandoned, but the middle of the auriferous zone has never been tried; at Fifteen Mile Stream, in the vicinity of the Serpent lead; at Moose River, where Mr. D. Tonquoy has his main shaft; at Waverley, on the east and west side; and at Oldham, west of the Black brook. No such systematic workings have, however, yet been undertaken in Nova Scotia, that I know of, except in Oldham, where Mr. J. E. Hardman began last summer to sink a perpendicular shaft on the anticlinal dome. The result of his undertaking is awaited with great interest.

"The pay streak of the leads in different districts is also a subject of great importance to miners: but, unfortunately, the data necessary to draw conclusions are very meagre, as in most of the mines, especially in old workings, no systematic records of the yield of different parts of the leads have been kept. I hope, however, to be able to throw some light on the subject from the notes I have gathered this summer.



"The materials of economic importance met with in the Lower Carboniferous comprise chiefly unexhaustible and valuable deposits of limestone and gypsum. One belt of fine grey limestone at Gay's River corner carries a good percentage of argentiferous galena; it runs east and west, rests unconformably upon the lower quartzite group, was worked some years ago where the south-west branch of Gay's river crosses it, and also prospected last summer at Carroll's corner, where some mining areas were taken up.

"The gold district of Gay's river was re-opened last spring by the Cole Stream Gold Mining Company, who put up an extensive 50 stamps steam mill and other large buildings. They sank a shaft, immediately north of Daniel McDonald's old works, which gave the following section of the Lower Carboniferous:—

	Feet.
Surface drift.....	20
Conglomerate containing gypsum, non-auriferous.....	35
Coarse sandstone.....	2
Auriferous, irregular conglomerate.....	8

"This lower auriferous conglomerate is wholly composed of debris of the adjacent Lower Cambrian rocks, apparently in an old river bed, and rests on the lower graphitic ferruginous slate group. Beds of conglomerate similarly situated along the northern boundary of the gold-bearing rocks may prove sufficiently rich to be worked, but the great excitement caused two years ago by exaggerated reports of discoveries of gold in various places, remote from the gold-bearing rocks, have led a great many to take up valueless ground. (See Summary Report for 1890, page 41.)

"The clay deposits on the Shubenacadie river, between Enfield and Shubenacadie railway stations, are well-known for their superiority for brick making, and brick yards have been in operation along the river bank for a great many years.

"Sand from the Dutch settlement is also used in New Glasgow for the manufacture of the best quality of glass and for moulding purposes.

"I was ably assisted, as in previous years, by Messrs. Archie Cameron and J. McG. Cruickshanks, for six months. I had also Mr. D. I. V. Eaton some two months surveying roads, and Mr. Walter C. Adams for two months.

"The season's work extended till 25th December, and the expenditure entailed, including salaries of all assistants, is \$1,420."

From the 17th of July to the 1st of October Professor Bailey, assisted by Mr. Lee Street, continued the examination and survey in south-western Nova Scotia, which was commenced in 1890, and on this he reports as follows:—

"The earlier part of the season was devoted to the examination of portions of Queen's and Shelburne counties for the exploration of which there had not been sufficient time during the previous season. These include a large part of the district traversed by the Port Medway river; the Liverpool river from Lake Rossignol to Liverpool; Fairy lake, Toboatic lake, Lake Rossignol and the associated smaller lakes; the Shelburne river, Broad river, the Roseway and the Clyde; together with several islands off the coast. Particular attention was also paid, in accordance with your instructions, to the determination of the position and extent of the various areas of granite associated with the Cambrian rocks both along the coast and in the interior of the counties named.

"In the prosecution of this work it was found necessary, in consequence of the very irregular boundaries of the counties, as well as from other considerations, to extend the observations in some instances beyond the limits of Queen's and Shelburne, to which they had previously been confined. A portion of the season was accordingly devoted to the examination of those parts of Lunenburg, Annapolis and Yarmouth counties, which are immediately adjacent to those last mentioned.

"The results obtained in these explorations, together with those of the previous season, have been embodied in a report which will be immediately submitted. In attempting, however, to prepare a map to accompany this report, great difficulty has



been experienced from the great want of accordance shown by the county maps upon which the field investigations are based. Not only do these differ in the position of lakes and rivers, and show numerous omissions, but even the same county lines upon adjoining maps, such as those of Shelburne and Yarmouth, though drawn upon the same scale, differ widely both in length and direction. Large tracts have, indeed, never been surveyed, and there does not appear to exist at present any materials from which anything like an accurate topographical map of the region can be constructed. The roads in the several counties which have been measured by odometer are fairly accurate, but a certain number of tie-lines, at least, are required to check the latter. Such maps as could be constructed from the data available will be submitted with the report."

The work of the Mining Division was continued by Mr. E. D. Ingall, assisted by Mr. H. P. Brumell in the general work of the division, and by Mr. Jas. White, who was engaged in making mining surveys on the Kingston and Pembroke railway iron phosphate district.

Of the progress of the work under his charge, Mr. Ingall furnishes the following notes:—

"During last winter Mr. Brumell and myself were occupied with the usual work connected with the collecting of mining information, statistical and otherwise, for the annual report of the division, and with the compilation and writing up of the same for publication. Besides this the usual preliminary summary April statement of Mineral Production for 1890 was made up and issued, the complete report for 1889 on coming to hand from the printer was similarly sent out. As far as the office routine connected with the above work would permit, advancement was made with the completion of the Directory of Mineral Occurrences, the representation of the same on maps, several of which are now almost complete. In answer to enquiries a number of 'memoranda of information' have been issued, often embodying material the collection of which occupied in the aggregate much time.

"Mr. White has been engaged plotting his surveys, preparing the maps for publication required before the geological investigation of the River du Lièvre phosphate deposits could be completed.

"These maps being available for use, it was considered advisable that I should during the summer, and as far as time permitted, attempt the further field studies necessary to enable a report to be issued embodying the results of these and previous investigations, which were necessarily discontinued on my appointment to the charge of the Mining Division.

"Before commencing this work, however, an effort was made to publish the Annual Report of the Division several months earlier than usual. All arrangements were made and the field work was set aside for that purpose, but meeting with insurmountable difficulties in connection with the printing, this intention had to be abandoned. The commencement of the field work was delayed until the 12th August, much fine weather was lost, and its continuance was necessitated as late as the 27th of November in order to complete the first sheet of the map of the du Lièvre phosphate district.

"During the above mentioned period the work done was altogether concentrated in the valley of the River du Lièvre. The details of the pyroxenite belt on which are situated the High Rock, Union and other mines had been as far as possible worked during previous seasons. Recent developments, however, created facilities for the extension of this work, and this belt was followed to the northern limits of the map, the High Falls mine.

"Most of the season, however, was spent in the study of the group of mines situated on the Little Rapids belt, and at the Emerald mine, all of which had necessarily received only limited attention previous to this. The Little Rapids belt was traced for several miles with a view to obtain another instance of the continuity of these pyroxenite belts. Special attention was paid to the details of the rock structure, where the extensive and plentiful exposures around the mine workings, gave a chance to accomplish this.

"The phenomena encountered being read by the light of the knowledge of the rocks of the district, accumulated during past seasons, presented many interesting points which will be set forth in the detailed report.

"During the latter part of the season I received very efficient aid from Mr. M. A. Bucke, who not only made topographical surveys around the mines, but also assisted generally in the geological work and rendered good service in the delineation of the rock areas.

"Owing to my own time having been altogether taken up with the above mentioned geological studies, the only general investigation of the mining industries of the Dominion were necessarily limited to those which it was possible for Mr. Brumell, the assistant to the division, to undertake. During the summer he was engaged as in former years in visiting sundry mining districts in order to study the extent and condition of the industry at these points. His studies were principally confined to the provinces of New Brunswick and Ontario. He furnishes the following notes on his work :—

"In New Brunswick the following points were visited and investigations made :—

"Gloucester county.—Development work was being actively prosecuted on a vein of argentiferous galena by Messrs. Payne and Ellis, of Bathurst. The vein is on Rocky brook, a branch of the Millstream ; work had also been done on a deposit of magnetic iron ore in the same vicinity.

"Albert county.—Investigations were made in the southern part of this county, where a considerable amount of prospecting was being carried on, notably around Shepody mountain and to the westward, where on Sawmill creek a bed of mica-schist, said to contain gold, had been opened up. Work was being carried on as in previous years at the gypsum quarries of the Albert Manufacturing Company, at Hillsboro' and E. W. Lynd's, at Hopewell, and operations had ceased at the Crimora Manganese Company's property in Dawson settlement. A small amount of work had been done at Gawland mountain, without, however, sufficiently promising results to warrant further operations.

"King's county.—The manganese property at Markhamville was still being operated, though smaller quantities of ore were being obtained, active prospecting was being carried on by means of diamond drills. Owing to the institution of the lately enacted mining law of the province, the manganese mine at Jordan mountain was idle. At Namwigewauk prospecting had been carried on to prove the gold bearing character of the conglomerate ridges of the vicinity. This work had been done under the auspices of the New Brunswick Mineral Developing Company.

"St. John county.—A new plumbago property has been opened up at St. John, and a considerable amount shipped.

"Victoria county.—Gypsum quarrying on the Tobique was being carried on as in former years.

"Carleton county.—Apparently fruitless efforts were being made at the Britton mine, Woodstock, in search of the gold and silver promised by several assays made of picked specimens.

"Charlotte county.—Considerable work had been done in prospecting for nickeliferous pyrrhotite on several bodies of which small shafts have been sunk.

"Throughout the province there seems to have been a general revival of interest in mining matters.

"Visits were also made to various parts of the province in search of further information relating to structural materials. In Quebec the only point, outside of Montreal and Quebec, visited was St. Hyacinthe, where small quantities of 'shale gas' of no commercial value had been found.

"In Ontario, west of Toronto, visits were made to several central points for the collection of data regarding structural materials, petroleum and salt, as well as to Essex and Welland counties where active boring operations in search of natural gas and petroleum were being carried on.



"In Hastings county, active mining had been commenced by the South Africa General and Developing Company, on a rich gold property in Belmont township, and on a deposit of magnetite in the same township by the Belmont Bessemer Ore Company of New York. At Belleville unsuccessful efforts had been made to obtain natural gas by boring.

"Work was begun on the 12th of July and continued with occasional interruptions until the 15th November.

"The surveys in the Kingston and Pembroke railway district were continued with a view to illustrating the mineral developments there. To this end it is proposed to make detailed surveys of the chief mines and also the roads and other topographical features serving to show the conditions of economic mining development in the district. Of this work Mr. White writes as follows :—

"During the summer surveys were made of the roads in the northern part of the district with odometer and compass. The principal iron and phosphate mines were mapped on scale, but otherwise the time at disposal and the nature of the country did not permit of any very accurate or detailed topographical work. As the iron mines had been closed for some time, the pits and underground workings were all full of water and any information relating to them had to be gleaned from outside sources. Another season's work will be necessary to complete the information for the map. During the past year no iron ore was raised in the district and but little phosphate, nearly all the mines producing the latter closing down in July and August. I was assisted during the early part of the summer by Mr. M. A. Bucke.

"The field work was begun on the 17th of July and completed on the 9th of October, when, after packing and storing the outfit, the party returned to Ottawa.

Since the return from the field Mr. Ingall and Mr. Brumell have been occupied with the usual routine and with the detail of the office work connected with the material for the annual mining report of the division. Mr. White has been engaged since his return in making additions and corrections to the topographical sheets of the map of the River du Lièvre district, which were rendered possible as the result of surveys made during the summer. The manuscripts of these are now complete, and the engraving of the upper half is nearly finished, so that the topographical edition should be shortly available. The geological notes for these must necessarily await the elaboration of the material resulting from the geological field studies. This will of necessity take some time, including, besides many other things, the close study of some hundreds of specimens. It is hoped, however, that it can be commenced as soon as the work on the annual report of the division is well started.

The expenditure for field work in connection with the division was \$2,529.24, made up as follows :—Expended by Mr. White in mapping the Kingston district, \$984.96 ; expended by Mr. Brumell in general mining investigations, \$771.58 ; expended by Mr. Ingall in further prosecuting the geological studies of the phosphate deposits, begun in previous years, \$772.70.

#### CHEMISTRY AND MINERALOGY.

Reporting on the work of this division, Mr. Hoffmann says :

"The work in the chemical laboratory during the past year, has been carried out upon the same lines as those heretofore followed. It was chiefly confined to the examination and analysis of such minerals, &c., &c., as were considered likely to prove of economic value and importance. The ground covered included :

"1. Analyses of fuels, comprising a semi-anthracite and coals from various localities in British Columbia, all of which proved to be of excellent quality.

"2. Analyses of mineral waters and brines. Of the former, some of those from British Columbia may not improbably, judging from the results of a qualitative analysis, prove of therapeutic value. Some of the latter belonged to, and constituted the last of, a series of saline waters—the examination of which had been commenced in the previous year—representing all the principal salt-springs on Swan and Winnipegosis



lakes in the province of Manitoba, and on the Red Deer river, district of Saskatchewan, North-West Territory. The object of the inquiry was to ascertain if these brines could be advantageously used for the manufacture of salt.

"3. Analyses of limestones and dolomites. In continuation of the series of analyses of limestones and dolomites already carried out in connection with an inquiry into the individual merits of a number of these stones—from various localities—for structural purposes and suitability as a flux in smelting iron and lead ores or as a glass-making material.

"4. Analyses of nickel and cobalt ores. The greater number of the specimens examined consisted of pyrrhotite from various localities in the districts of Nipissing and Algoma, province of Ontario. These were all found to contain a satisfactory percentage of nickel. A pyrrhotite from what is reported to be an extensive deposit, in Charlotte county, New Brunswick, was also examined and found to contain 1·72 per cent nickel, 0·16 per cent cobalt, and 0·31 per cent copper. This material closely resembled much of the ore found in the above mentioned districts. Besides these, many other samples of pyrrhotite from other parts of the Dominion were examined.

Reference may, not inappropriately, here be made to certain other nickeliferous ores, the occurrence of which has been pointed out in previous reports of this Survey. One of these, a steel-grey pyritous ore, from the Wallace mine on Lake Huron, contained 13·93 per cent nickel; whilst of two others found on Michipicoten island, Lake Superior, the one, consisting of an intimate mixture of the arseniurets of copper and nickel, was found to contain from 17·03 to 36·39 per cent nickel, and the other, a hydrated silicate of nickel, gave, after drying at 100° C., 23·91 per cent nickel.\*

"5. Gold and silver assays of ores from the provinces of Nova Scotia, New Brunswick, Quebec, Ontario and British Columbia. The greater number coming from the last named province.

"6. Analyses of iron ores from the provinces of Nova Scotia, Ontario and British Columbia.

"7. Miscellaneous examinations. These include the partial analysis or testing, as the case might be, of brick and pottery clays, cement-stones, phosphatic rock, graphite, talc, &c., &c. The talc referred to was almost snow-white in colour and would appear to be almost, if not quite, as well adapted for use as a 'filler' in the manufacture of paper, as the talcose mineral found at Edwards near Gouverneur, Saint Lawrence county, in the State of New York.

"In addition to the work included under the foregoing headings, examinations and analyses have been made of several minerals recently met with, and now for the first time identified as occurring in Canada. The more important, from a commercial standpoint, of these are:—Gersdorffite, nickel arsenosulphide, a rich nickel ore from the township of Denison, district of Algoma, and Danaite, a cobaltiferous variety of mispickel, a useful ore of cobalt, from the township of Graham, also in the district of Algoma. These, with some others of more purely scientific interest, add materially to the list of minerals already known to occur in Canada.

"Amongst the many specimens received in the course of the year, were three of more than usual interest, viz., samples of cinnabar ore and native mercury from Seshart channel, Barclay sound, Vancouver island, British Columbia, and a sample of native platinum found, in association with gold, on the bars of the North Saskatchewan river, in the neighbourhood of Edmonton, district of Alberta, North-West Territory. Native platinum had previously only been met with, in Canada, in British Columbia, and, in small quantities, in Beauce county, in the province of Quebec.

"During the period in question, seven hundred and five mineral specimens were received for the purpose of identification or the obtaining of information in regard to their economic value. The greater number of these were brought by visitors, and the information sought in regard to them was not infrequently communicated to them at the time of their calling. In other instances—those where a more than mere cursory

\* *Geology of Canada*, 1863. Chap. XVII, XIX, XX, pp. 505-7; 614 and 737-38.

examination was called for, or a partial or even complete analysis was deemed desirable, as also in the case of those specimens which have been sent from a distance—the results were communicated by mail. The number of letters written, chiefly in this connection, and generally of the nature of reports, amounted to two hundred and ninety, and the number of those received to one hundred and sixty-one.

“Mr. R. A. A. Johnston has diligently applied himself to, and most satisfactorily carried out, the work entrusted to him. In addition to the gold and silver assays, analyses of limestones, dolomites and nickel ores, he has conducted a great variety of miscellaneous work. Mr. F. G. Wait was principally engaged in the analysis of mineral and other saline waters.

“On the work connected with the mineralogical section of the museum, I have been most ably and zealously assisted by Mr. R. L. Broadbent. He has been engaged in the permanent labelling of specimens—a work which must of necessity be a more or less continuous character by reason of the many frequent additions to the collection; the re-adjustment of some of the cases, incident upon the introduction of several new table-cases, for the purpose of allowing of a more systematic arrangement of the economic minerals of some of the provinces—and in maintaining the collection in general in an orderly condition.

“The catalogue of this section of the museum, in the preparation of which I have had the hearty co-operation of Mr. Broadbent, will appear in the course of the coming year (1892).

“Very many of the mineral specimens have been replaced by more characteristic ones, and the collection augmented by the addition of some one hundred and twenty others. Of these, the following were collected by members of the staff:—

1. Ami, H. M. (Survey):

Argentiferous galena from the Elizabeth claim, Fish river, West Kootanie district, British Columbia.

2. Bailey, Professor L. W. (Survey):

(a.) Staurolite from North East Harbour, Shelburne county, Nova Scotia.

(b.) Garnet on diorite from Chegoggin, Yarmouth county, Nova Scotia.

(c.) Garnet rock from Chegoggin, Yarmouth county Nova Scotia.

3. Barlow, A. E. (Survey):

(a.) Cyanite, seventy specimens. (b.) Fibrolithe, eight specimens. (c.) Gersdorffite, ten specimens. (d.) Huronite, forty specimens. (e.) Niccolite, six specimens. (f.) Nickeliferous pyrrhotite, one hundred and twenty specimens. (g.) Oligoclase, eight specimens. All from the Sudbury district, province of Ontario.

4. Brumell, H. P. (Survey):

(a.) Petroleum from Walker's 'No 2' well, Marshfield, south-west corner of lot 11, range IV, of Colchester, Essex county, Ontario.

(b.) Petroleum from St. Joseph, parish of Dorchester, Westmoreland county, New Brunswick.

5. Dawson, Dr. G. M. (Survey):

Coal from the Canmore mine, one mile from Canmore station on the line of the C. P. R., south-east side of Bow river, district of Alberta, N. W. T.

6. Ferrier, W. F. (Survey):

About two hundred specimens of scheelite, tungstate, &c., from lot 1, range VII, township of Marlow, Beauce county, Quebec.

These include many fine and rare crystals, as well as a few large specimens suitable for the economic collection.

Ninety specimens of the silver ores from lots 1, 2, 3, and adjoining ones, ranges XIV, XV, and XVI, Risborough township, and lot 1, range VII, Marlow township, Beauce county, Quebec; also about twenty-five specimens of minerals associated with these ores, some of which have not yet been fully identified.

6. Giroux, N. J. (Survey):  
Chromite (two specimens) from the townships of Leeds and Thetford, Megantic county, province of Québec.
7. McEvoy, J. (Survey):  
Muscovite (three specimens) from near the junction of Canoe river with the Coldwater, British Columbia.
8. McInnes, W. (Survey):  
  - (a.) Argentite with pyrite, fluorite and calcite, from the Beaver mine.
  - (b.) Argentite and sphalerite with fluorite from the Beaver mine.
  - (c.) Argentite with native silver, and sphalerite, in calcite and quartz, from the Porcupine mine.
  - (d.) Galena with sphalerite, in quartz, from the Badger mine.
  - (e.) Magnetite, from Greenwater lake.—All from the district of Thunder bay, Ontario.
9. Selwyn, Dr. A. R. C.:  
Auriferous quartz, from the Gladstone mine, township of Marmora, Hastings county, Ontario.
10. Smith, W. H. C. (Survey):  
Magnetite, from Big Turtle river, district of Rainy river, Ontario.
11. White, J. (Survey):  
  - (a.) Celestite, from lot 7, range X, of Bagot, Renfrew county, Ontario.
  - (b.) Moulding sand, from lot 3, range V, of north Sherbrooke, Lanark county, Ontario.

And the undermentioned constituted presentations:

1. Campbell, John, Nanaimo, British Columbia:  
Limonite, from Texada island, British Columbia.
2. Chubbuck, C. E. D. Ottawa:  
Phlogopite, from lot 13, range XV, of Hull, Ottawa county, province of Quebec.
3. Claxton, F. J., Victoria, British Columbia.  
Cinnabar ore, from Seshart channel, Barclay sound, Vancouver island, British Columbia.
4. Coughlin, D.:  
Nickeliferous pyrrhotite, from lot 9, range VI, of Lorne, district of Algoma, Ontario.
5. DeWolf and Munro, Vancouver, British Columbia.  
  - (a.) Pottery clay, from Guichon creek, Nicola river, British Columbia.
  - (b.) Specular iron, from the junction of Nicola and Coldwater rivers, British Columbia.
6. Davey, Capt. T. R., per W. F. Ferrier (Survey):  
From the Harvey Hill mines, Leeds township, Megantic county, Quebec.:  
Chalcopyrite, twenty-five specimens.  
Bornite, twelve specimens.  
Chalcocite, eight specimens.  
Molybdenite, three specimens.
7. Firth, W., per R. G. McConnell (Survey):  
Vivianite, from the 'Ramparts,' Porcupine river, Yukon district.
8. Hammond, H. C., Winnipeg, Manitoba, per Dr. G. M. Dawson (Survey):  
Argentiferous galena, from Vermont creek, McMurdo district, East Kootanie, British Columbia.
9. Haycock, E. B., Ottawa:  
  - (a.) Phlogopite, with plant inclusion, from north half of lot 10, range V, of Hull, Ottawa county, province of Quebec.
  - (b.) Phlogopite, dressed sheet, from same locality as the preceding.
10. Laperrière, M., per N. J. Giroux (Survey):  
Picrolite, from lot 18, range IV, of Durham, Pontiac county, province of Quebec.



11. Mackay, J. W., per Dr. G. M. Dawson (Survey):  
Native copper, from above Stein creek, Fraser river, British Columbia.
12. McLellan, S:  
Phlogopite, from lots 11 and 12, range XVI, of Hull, Ottawa county, province of Quebec.
13. McCuaig, R. C. W., Ottawa:  
Muscovite, from lots 4 and 5, range XI, of the township of Miller, Frontenac county, Ontario.
14. McRae, Hector, Ottawa:  
(a.) Apatite in pyrite, from lot 11, range V of Templeton, Ottawa county, province of Quebec.  
(b.) Core of garnetiferous granite, from boring at last mentioned locality.
15. Nellis, T. F., Ottawa:  
(a.) Phlogopite with inclusions of albite, apatite, garnet and pyrite, from lot 10, range XII, of Hull, Ottawa county, province of Quebec.  
(b.) Phlogopite with inclusion of molybdenite, from same locality as the last.  
(c.) Phlogopite with inclusion of pyrite, from same locality as the two preceding.
16. Poole, H. S., Stellarton, Nova Scotia:  
Sphalerite and chalcopryite, from the Albion mines, Pictou county, Nova Scotia.
17. Röeser, F., Kootanie Smelting and Trading Syndicate, Revelstoke, British Columbia, per H. M. Ami (Survey):  
Ingot of argentiferous lead, smelted from ore from the Monarch claim, at the Revelstoke smelter.
18. Ryckman, S. S., M.P., Hamilton, and W. H. Scott, of Illecillewaet, British Columbia:  
Argentiferous galena, from the Elizabeth claim, Fish river, West Kootanie district, British Columbia.
19. Smart, Capt. W. J., Montagu, Nova Scotia:  
Auriferous quartz, from the Rose lead, Montagu mine, Halifax county, Nova Scotia.
20. Jones, F., Clinton, British Columbia, per Dr. G. M. Dawson (Survey):  
Native gold, from the Bonanza claim, Cayoosh creek, near Lillooet, British Columbia.
21. Sperry, F. E., Sudbury, Ontario, per A. E. Barlow (Survey):  
Polydymite, from the Vermilion mine, lot 6, range IV, of Denison, district of Algoma, Ontario.
22. Warmington Stone and Marble Company, Garden River, Ontario.  
(a.) Limestone polished, from Echo lake, district of Algoma, Ontario.  
(b.) Limestone polished, from Garden River, district of Algoma, Ontario.

"Mr. C. W. Willimott has, for the most part, been engaged in making up collections of minerals and rocks for various educational institutions. The following is a list of those to which such collections have been sent:—

1. St. Mary's Academy, Windsor, Ont. . . .	Consisting of 103 specimens.		
2. City Museum, Vancouver, B.C. . . . .	do	106	do
3. Collegiate Institute, Napanee, Ont. . . . .	do	106	do
4. Protestant Board of School Commissioners, P.Q. . . . .	do	106	do
5. College of Hull, Hull, P.Q. . . . .	do	96	do
6. Elgin Street School, Ottawa, Ont. . . . .	do	96	do
7. Model School, Windsor Mills, P.Q. . . . .	do	108	do
8. Upper Canada College, Toronto. . . . .	do	108	do
9. Waterville Model School, Waterville, P.Q. . . . .	do	108	do
10. Public School, St. Stephen, N.B. . . . .	do	96	do
11. do St. Lambert, P.Q. . . . .	do	91	do
12. Preston Mechanics' Institute, Preston, Ont.	do	96	do

13. St. Patrick's High School, Halifax, N.S., consisting of	96	specimens.
14. Legislative Assembly, Winnipeg, Man. . . . .	do	108 do
15. High School, Bowmanville, Ont. . . . .	do	106 do
16. do Oshawa, Ont. . . . .	do	91 do
17. do (Victoria), Moncton, N.B. . . . .	do	108 do
18. Panet Street School, Montreal, P.Q. . . . .	do	91 do
19. Mount Allison University, Sackville, N.B. . . . .	do	145 do
20. Bathurst Village School, Bathurst, N.B. . . . .	do	108 do
21. Central School, Brantford, Ont. . . . .	do	108 do
22. Lunenburg County Academy, Lunenburg, N.S. . . . .	do	108 do

“The following collections are in course of preparation for, and will shortly be sent to, the undermentioned institutions :—

1. Collegiate Institute, Morrisburg, Ont. . . . .	consisting of	108	specimens.
2. do Peterborough, Ont. . . . .	do	108	do
3. School of Practical Science, Toronto, Ont. . . . .	do	108	do
4. Morrin College, Quebec, P.Q. . . . .	do	108	do
5. High School, St. George, N.B. . . . .	do	108	do
6. do Georgetown, Ont. . . . .	do	108	do
7. Central School, Moncton, N.B. . . . .	do	108	do

“A collection of two hundred and fifty specimens, sent by the College of St. Laurent, Montreal, for identification, was named and returned.

“In the course of the summer months Mr. Willimott visited—with the object of procuring further material for the making up of collections, and cabinet specimens for the Museum—the townships of Buckingham, Hull, Low, Masham, Portland, Templeton, Villeneuve and Wakefield, in Ottawa county, province of Quebec; those of Bromley, Brudenell, Ross and Sebastopol, in Renfrew county, and that of Cameron, district of Nipissing, in the province of Ontario.

“In the prosecution of this work he has succeeded in collecting a large and varied assortment of minerals, and at the same time made many interesting and useful observations in regard to their mode of occurrence. The collection comprised :—

	Specimens.
Albite, massive. . . . .	50
Albite, crystals. . . . .	15
Albite with smoky quartz, fluorite and amazon-stone. . . . .	25
Apatite, crystals. . . . .	230
Apatite in calcite. . . . .	36
Biotite. . . . .	44
Fluorite with albite and sphene. . . . .	50
Fluorite with amazon-stone. . . . .	40
Graphite. . . . .	48
Gummite. . . . .	12
Hornblende, groups of crystals. . . . .	20
Hornblende with tremolite. . . . .	96
Microcline, massive. . . . .	60
Microcline, crystals. . . . .	8
Mountain cork. . . . .	20
Muscovite. . . . .	75
Orthoclase, groups of crystals. . . . .	75
Phlogopite. . . . .	45
Phlogopite, crystal. . . . .	1
Pyrite with pyrrhotite. . . . .	110
Pyroxene, crystals. . . . .	300
Pyroxene, groups of crystals. . . . .	50

	Specimens.
Quartz . . . . .	35
Quartz, groups of crystals . . . . .	50
Scapolite, crystals . . . . .	6
Scapolite, groups of crystals . . . . .	60
Spessartite . . . . .	50
Sphene, crystals . . . . .	30
Sphene in calcite . . . . .	20
Tourmaline, crystals . . . . .	17
Tourmaline in albite . . . . .	88
Uraninite (diss.) . . . . .	36
Wollastonite in calcite . . . . .	50
Miscellaneous associations . . . . .	30
Three minerals (under examination) represented by . . . . .	77

Total number of specimens collected. . . . . 2,039

Galena from Bedford (applied for). . . . . 300 lbs.

"The foregoing include very many handsome cabinet specimens, the most conspicuous amongst which are some white and reddish crystals of albite; crystals of black tourmaline; fine specimens of spessartite; crystals of Wollastonite in sky-blue calcite, one some two inches in length and a little over one inch in breadth and well terminated; a crystal of phlogopite, fifteen inches and a-half long, three inches and a-half diameter at the top, four inches and a-half diameter at the centre, and weighing some fifteen pounds; also a very handsome group of crystals of microcline."

Mr. W. F. Ferrier, lithologist, reports that during the year, as in 1890, he has been engaged in the study, arrangement and classification of the stratigraphical collection of rocks. Early in the year new cardboard trays were ordered to fit the drawers under the flat cases devoted to this collection. Thirty-nine of these drawers were gone over, the specimens cleaned and provisionally arranged in the new trays, worthless material was rejected and three boxes of duplicates were carefully labelled and placed in store. This work involved the handling of over 1,800 specimens. There are 141 more drawers, all the specimens in which will have to be similarly gone over before the best and most suitable series can be selected for the exhibition cases, and their systematic arrangement carried out.

Superintending the preparation of the rock sections required for the microscopical determination of the characters of the specimens also occupied considerable time; 142 such sections were prepared and studied during the year.

On the 21st of July Mr. Ferrier left Ottawa to make some lithological investigations in the Eastern Townships, more especially in Broughton and Leeds.

In the spring while examining the rocks collected by Mr. Webster in 1879, Mr. Ferrier had recognized in a specimen from lot 1, range VII of Marlow, a small fragment of scheelite or tungstate of lime. He therefore also visited this locality and succeeded in finding it in some quantity in quartz veins, cutting Cambrian slates, and accompanied by its decomposition product tungstate or tungstic acid. Galena, copper and iron pyrites, blende and other minerals were also found in the veins.

On the 10th of August he returned to Ottawa and was occupied chiefly in microscopical work till the 30th of September when he again visited the locality, remaining there till the 8th of October. The tungsten minerals were found in nearly all the veins examined, but in some only in small quantity.

The best locality, apparently, is that from which the original specimen came, where they are rather abundant in the vein. Though little more than a foot wide at its outcrop, further development might reveal the tungsten ore in quantities sufficient to justify mining on this vein. No ore of tungsten had hitherto been recognized in situ\*

\*Geology of Canada, 1863, p. 503.



in Canada. Its discovery is of interest at a time when so many experiments are being made with steel, in view of the remarkable and valuable properties possessed by tungsten steel.

Tungstic acid has also been used in calico printing to produce a yellow colour.

The discovery is also interesting in connection with the fact that scheelite is very commonly accompanied by ores of tin and that for several years past I have indicated this south-eastern portion of the province of Quebec as the district where this ore should be sought, and where, if anywhere in Canada, the search might prove successful. In Phillip's mineralogy it is stated: "This mineral (scheelite) occurs both crystalline and amorphous, particularly in the depositories of tin ore at Schlackenwald and Zinnwald, in Bohemia, and in Monroe county (Conn.), United States."

Mr. Ferrier collected many fine crystals of scheelite as well as large samples of the ore, for the museum. An analysis, by Mr. R. A. A. Johnstone under the supervision of Mr. Hoffmann, was made in the laboratory of the survey, and showed the scheelite to contain 79.9 per cent of tungstic acid, or within 7 per cent of the theoretical quantity.

The full analysis will appear in Mr. Hoffmann's report on the chemical work of the survey.

Since the 8th of October Mr. Ferrier was chiefly occupied in the examination of specimens collected during the summer by various members of the staff in order to ascertain their character by means of the microscope and blow-pipe. These examinations include a detailed report on specimens from Chateau Richer, Quebec, to accompany Mr. Low's report on work in that district, and also a microscopical examination of Huronian rocks from the Sudbury district collected by Mr. Barlow. This was being proceeded with at the close of the year. The cost of the season's work in the field was \$209.89.

#### PALEONTOLOGY AND ZOOLOGY.

Mr. Whiteaves reports that the third part of the first volume of "Contributions to Canadian Palæontology" was published in May last. It consists of a systematic and descriptive report, of fifty-eight pages octavo, illustrated by six full page lithographic plates, on the fossils of the Devonian rocks of the Mackenzie River basin, for the most part collected by Mr. R. G. McConnell in the years 1887, 1888 and 1890. A full suite of the specimens to which it refers has been placed on exhibition in the museum, and such duplicates as remain have been labelled for distribution to educational institutions in Canada.

A paper on "the Orthoceratidæ of the Trenton Limestone of the Winnipeg basin" has been written for the Transactions of the Royal Society of Canada, and is now printed in the volume for the current year. This paper consists of 10 pages quarto, illustrated by seven full page lithographic plates.

During the past year, also, three descriptive and illustrated papers on purely palæontological subjects have been written for and printed in the "Canadian Record of Science." The first of these, which is entitled "Descriptions of Four New Species of Fossils from the Silurian Rocks of the South Eastern Portion of the district of Saskatchewan," was published in the April number of the "Record," and consists of eleven pages octavo of letter press, illustrated by one full page lithographic plate. The second, which, with the third, was published in the October number of the "Record," consists of a description of a large new species of *Panenka* from the Corniferous limestone of St. Mary's, Ontario, and is illustrated by one full page lithographic plate. The third is a note "on the Occurrence of Paucispiral Opercula of Gasteropoda in the Guelph formation of Ontario," and is illustrated by one woodcut.

The third part of the "Contributions to Canadian Micro-Palæontology," by Professor T. Rupert Jones, F.R.S., referred to in the last annual report as having been received in MSS., was published in August. It consists of forty-two pages of text, illustrated by four full page lithographic plates.

It has been decided to devote the second volume of the "Contributions to Canadian Palæontology" to an illustrated monograph on "Canadian Fossil Insects," which Pro-

fessor S. Scudder, of Cambridge, Mass., the most experienced authority on this subject in America, has kindly promised to prepare. The first part of this volume, consisting of a paper, of twenty-six pages large octavo, and illustrated by one full page lithographic plate, "on the Tertiary Hemiptera of British Columbia," was published last April, and the second part is now nearly ready for the printer.

The manuscript of a considerable portion of the fourth part of the first volume of the "Contributions to Canadian Palæontology" has been written and eight of the lithographic plates required to illustrate it have been printed off. As stated last year, this report, when complete, will consist of a descriptive and systematic report on the unusually large collections of fossils made by Mr. Tyrrell in 1888 and 1889 from the Devonian rocks of lakes Manitoba and Winnipegosis. That part of the letter press which is now nearly ready for the printer consists of descriptions or identifications, as the case may be, of the whole of the species of sponges, corals, echinodermata, vermes, polyzoa, brachiopoda and of part of the pelecypoda, represented in those collections, and it is hoped that the whole report will be ready for publication in the spring. The Stromatoporoids in these collections have already been kindly reported upon by Professor H. Alleyne Nicholson, of the University of Aberdeen, in a paper in the Annals and Magazine of Natural History (London, England) for April, 1891, in which the species are described and figured.

Since the systematic "List of the Fossils of the Hamilton Formation of Ontario" was published in 1887, in the second part of the first volume of "Contributions to Canadian Palæontology," so many additional species from that formation have been received and so much new information about its fauna has been obtained, that it is thought desirable to publish a supplement to this list at an early date. With a view of making this supplement as complete as possible, about a week last summer was spent in an examination of all the exposures of the Hamilton formation near Thedford and Arkona and in a study of the fossils obtained therefrom during the past four years by the Rev. Hector Currie, of Thedford. Some interesting additions to this local fauna were thus made, and the writer is greatly indebted to Mr. Currie for his courtesy on this, as on a previous and similar occasion, and for the loan of some of the rarest specimens of fossils from his cabinet.

In Zoology, an important collection of the mammalia, birds and reptiles of the Rocky Mountain park, and a series of about 175 specimens of birds and small mammalia from Indian Head, Assiniboia, have been received during the year from Professor Macoun. A few interesting additions have been made to the zoological collections in the museum through Dr. G. M. Dawson, in connection with the British Behring Sea Commission, being chiefly donations from various gentlemen, or purchased as noted elsewhere. These include the skin and skull of a Pacific walrus, the skeleton of an adult male fur seal, some bones of the extinct *Rhytina* of Behring Island, a specimen of the sooty albatross from the coast of British Columbia, &c.

Besides a few birds which have been put up as skins, nine specimens of Canadian mammalia, one hundred and six specimens of birds, and one turtle, have been skilfully mounted during the past year, by Mr. S. Herring, the taxidermist to the survey, but most of these are intended for the museum which it is proposed to establish in the Rocky Mountain park at Banff. Among the more interesting specimens of native mammalia recently added to the survey museum, and not already enumerated, are a Rocky Mountain sheep, a fine example each of the "fisher" and cross fox, both from Norway House, and presented by Mr. Horace Belanger, and a yellow-haired porcupine from Illicillewaet.

During the director's absence from the city, on field work, the duties of acting director have, as usual, devolved upon Mr. Whiteaves, and, in addition to the correspondence entailed thereby, 263 official letters have been received during the year and 227 written.

Mr. Weston reports that, with the exception of one month spent in field work, the whole of his time, from the 15th of January up to the end of the year, has been occupied in work in the paleontological and archaeological branches of the museum, in the rear-



range of specimens and the incorporation of new ones into the collection, in the writing of labels, in making improvements in the contents of many of the glass cases, in the preparation of fossils either for study or for exhibition in the museum, in the making of microscopic sections of rocks and fossils, and in other office work. From the 1st to the 27th of July he was engaged in the examination of various rocks in the city of Quebec, on the north shore of the Island of Orleans and along the north shore of the St. Lawrence between the mouth of the St. Charles river and St. Joachim. At each of these localities interesting collections of fossils were obtained, some of which will, it is expected, throw additional light on the stratigraphical relations of the rocks from which they were obtained. Among these fossils are a large series from the Hudson River formation along the north shore of the Island of Orleans, and a fine collection from the Utica slate in the vicinity of the mouth of the St. Charles river.

Mr. H. M. Ami reports that during the past year, with the exception of two months spent in the field, he has been employed in the examination and determination of the species in various collections of fossils made by members of the staff. He has completed the examination and comparison of some graptolites from the graphite-bearing slates of St. John, New Brunswick, and has made a list of fossils from an outcrop of Silurian rocks, on the east branch of the River Philip, Cumberland county, Nova Scotia, recognized by Mr. Scott Barlow in 1876. It lies sixteen miles to the west from the outcrop of the same formation at Wentworth, on the Intercolonial railway. For Mr. A. Low he has identified and prepared lists of the species in four collections from the Trenton limestone below St. Alban, above and below St. Casimir, and on River Charlotte, P.Q. He has also examined a small collection of graptolites from Côte Sauvageau, near Quebec city, and has prepared lists, for publication in Dr. Ells' report, of fossils from Philipsburg, St. Armand, Mystic, Stanbridge, Lake Memphremagog, and other localities in the province of Quebec, that were collected in 1890 by Dr. Ells and Messrs. Whiteaves and Deeks. The specimens examined from these well-known Cambro-Silurian localities were about 1,300. A preliminary examination has been made by him of about 500 specimens of fossils, collected by Mr. Giroux in the counties of Joliette, Berthier and Maskinongé, with a view of revising the boundaries of the Chazy and Trenton formations in those districts. Miscellaneous collections of fossils from Ontario, Quebec and Nova Scotia, made in past years by Messrs. Weston, McInnes, A. Ogden, and H. Fletcher, from rocks of Cambro-Silurian and Silurian age have been examined and lists of the species prepared.

Some progress has been made in making up collections from the duplicate specimens in the museum, for distribution. Specimens have been sent to Mr. G. F. Matthew, St. John, N.B., and to Col. Grant and Mr. Wm. Turnbull, of Hamilton, in exchange for specimens received from them. Suitable collections of fossils are being prepared for the University of Toronto, the University of Fredericton, for Acadia College, Wolfville, N.S., and for other educational institutions. He has examined and, so far as their condition permitted, named, for the Rev. J. Carrière, principal of St. Laurent College, a miscellaneous collection of fossils, ranging from the Cambrian to the Cretaceous. Labels have been prepared, to be printed, for specimens in the museum from the Trenton, Devonian and Post Pliocene formations. He assisted in reading and correcting the proofs and revises of a palæontological publication prepared for the Survey, by Professor Rupert Jones.

From the 17th of July to the 15th of September Mr. Ami was occupied in field work, chiefly on and in proximity to the line of the Pacific railway in the Selkirks from Revelstoke eastward to Beaver Mouth and Donald, and thence to the summit of the Rocky mountains east of Field. He carefully examined the natural exposures and rock cuttings between Revelstoke and the summit of the Selkirks, but was as unsuccessful in finding fossils in these rocks as Dr. Selwyn and Dr. Dawson had been when they examined them in 1890.

Between Beaver Mouth and Donald, two miles west of the latter, the numerous exposures were likewise carefully examined and in these he succeeded in finding an abundant fauna; crustaceans, pteropods and brachiopods; the genera, *Olenellus*,



Agnostus and Hyolithes were noticed, thus confirming the supposed Lower Cambrian age of these rocks. East of Donald, at the Glenogle slate and flag quarries, between Palliser and Golden, an interesting collection was made of the graptolites of that locality. At Field the trilobite beds on the western flank of Mount Stephen were visited, and an interesting collection made, containing about 25 species and 500 specimens of the Middle Cambrian fauna, first discovered in Mt. Stephen by Mr. McConnell.\* At Anthracite, near Banff, about 100 specimens of fossil plants were collected from the Cretaceous rocks of that vicinity.

Besides the foregoing examinations Mr. Ami reports having ascended Moose creek, the south branch of the Illecillewaet for two miles and that the only rocks seen were dark coloured argillites inclined at a high angle. On the 10th of July, with a view to finding the contact of the gneissic rocks with the newer overlying series of the Illecillewaet valley, he left the railway five miles above Illecillewaet and ascended the Flat creek trail seven miles to the summit. He then descended by Slick creek and Jeopardy slide five miles into the Fish river valley. One day was spent in the Fish river valley and the exposures for four miles down on the left bank to the mouth of Granite creek were examined. Granite creek was ascended for about one mile, to about 1,500 feet above Fish river, at which elevation massive granite occurs and apparently extends to the summit of the range. Specimens of all the rocks here seen were collected, and also samples from a vein of argentiferous galena then recently discovered and on which some 18 claims had been registered. On the 12th of July, he returned to Illecillewaet. The next day Corbyn trail was ascended to the summit of the range between the Illecillewaet and the North Fork, and specimens of the rocks were collected.

Five specimens of the galena above referred to have been assayed in the laboratory of the survey, giving 108.6, 109.3, 149.9, 175.7 and 204.1 ozs. to the ton of 2,000 lbs. and about 80 per cent of metallic lead.

Mr. Lambe reports that during the first half of the year he was engaged in a study of the large collections of fossils made by Messrs. Tyrrell and Dowling from the Devonian rocks of Lakes Manitoba and Winnipegosis in 1888 and 1889, assisting in their identification and determination. He has prepared drawings of a large number of the species of sponges, corals, polyzoa, brachiopoda, pelecypoda and gasteropoda contained in these collections, which, with the exception of those of the gasteropoda, have been already lithographed on stone and the entire issue of 1,100 copies printed, forming plates 33, 34, 35, 36, 37, 38, 39 and 40 for the Contributions to Canadian Palæontology, vol. i, pt. iv. (Shortly to appear.)

During the latter half of the year he was occupied in an examination of the Orthoceratidæ from the Trenton rocks of Lake Winnipegosis, assisting Mr. Whiteaves in their identification and determination. He has prepared drawings of these fossils, which form part of collections made by Mr. Weston in 1884, by Mr. Tyrrell in 1889, and by Messrs. Dowling and Lambe in 1890, reproductions of which appear in plates 5, 6, 7, 8, 9, 10 and 11 of the Transactions of the Royal Society of Canada for 1891 (now in the printers' hands) illustrating Mr. Whiteaves' paper on the Trenton Orthoceratidæ of Manitoba, &c.

He has begun a classification of collections of fossils recently made from Lake Winnipeg, and has made a number of drawings for the better illustration of *Edrioaster Bigsbyi*, Bill.; *Amygdalocystites florealis*, Bill.; and *Pleurocystites filitextus*, Bill., from the Trenton rocks at Ottawa. During the month of January, he was engaged in an examination of some fossils collected by Mr. McConnell in the Athabasca river, in 1890, and in preparing drawings for their illustration. These are published, in plate 32 of the Contributions to Canadian Palæontology, vol. 1, pt. iii. He has devoted some time to the examination of the fossils described in the papers published by Mr. Whiteaves in the Can-

\* Annual Rep. Geol. Survey, 1886, Part D.

adian Record of Science for April and October, referred to on p. 49 of this report, and has made all the drawings that are reproduced to accompany these papers.

In August he visited Peterborough, Woodstock and St. Mary's, Ont., and made collections of fossils from the exposures of Trenton limestone in the former place and from the Corniferous rocks of the latter, and later, in October, he spent a few days with Dr. Ells, in the vicinity of L'Orignal and Hawkesbury, Ont., collecting fossils from the Trenton and Chazy rocks near these localities.

The following is a list of specimens collected by officers of the survey during the past year, or presented to its museum through them :—

Dr. G. M. Dawson :

Specimens obtained in connection with the Behring Sea Commission, as under :—

Eight Haida (Queen Charlotte Island) trumpets and whistles, and one castanet  
—Purchased.

One pair snowshoes, King's Island, Okeegmut tribe, Eskimo.	} Presented by Capt. M. A. Healy.
One bird snare made of whalebone, Kotzebue Sound, Eskimo.	
Net, Kotzebue Sound, Eskimo.	
Skin of Pacific walrus, from Behring Strait.	

One pair snowshoes, Nunivak Island, Behring Sea, Magemut tribe, Eskimo.	} Presented by Capt. Hadley, H.M.S. "Pheasant."
One bird-dart, Nunivak Island, Magemut tribe, Eskimo.	

Specimens of Sponges and Sertularians from various localities.

One skull of the Pacific walrus (*Odobæus obesus*), from Kamtschatka.—Purchased.

Seal and sea otter spear, and throwing stick for same, Atka Island, Aleut.—Purchased.

Sixteen skins of birds from Behring Sea.—Collected by J. M. Macoun.

Four skins of birds from Behring Island.	} Presented by Mr. N. Grebnitzky.
Bones of <i>Rhytina Stelleri</i> .	
Skeleton of male fur seal.	

Skull of *Rhytina*, from Behring Island.—Purchased.

Several specimens of *Velutina coriacea* from St. Paul's Island.

J. F. Whiteaves :—

A number of specimens of fossils from the Hamilton formation near Thedford and Arkona, Ont.

Prof. Macoun :—

About fifty specimens of fossils from the Lower Carboniferous rocks of the Rocky Mountain park, Alberta.

R. W. Ells & W. E. Deeks :—

About 1,000 specimens of fossils from various localities in the counties of Missisquoi, St. John, Laval, St. Hyacinthe, Bagot and Iberville, in the province of Quebec, and Russell and Prescott, in the province of Ontario.

R. G. McConnell :—

Twenty fossils from the Cretaceous rocks of the foot-hills of the Rocky mountains.

J. B. Tyrrell :—

Head of caribou (*Rangifer Caribou*) from Hole river, Manitoba.

T. C. Weston :—

About 250 specimens of fossils from various localities along the north shore of the St. Lawrence, between Quebec city and Cape Tourmente, also on the Island of Orleans.

L. M. Lambe :—

200 specimens of fossils from the Trenton and Chazy limestone at Peterborough, L'Orignal and Hawkesbury, and about 100 from the Corniferous limestone of Woodstock and St. Mary's, Ont.

A. P. Low :—

About seventy-five fossils from the Trenton and Black River limestone of Jacques Cartier county, P.Q., also twenty specimens of Post-Tertiary fossils from the same district.

R. Chalmers :—

A number of specimens of four species of fossils from excavations in marine alluvium at the west end of the Chignecto ship railway, at the head of the Bay of Fundy, and fossil wood of two species of trees from New Brunswick.

Numerous examples of twelve or more species of fossils from the Leda Clay and interglacial beds at Duck Cove and Negrotown Point, Lancaster, St. John county, N.B.

H. M. Ami :—

About 600 specimens of fossils from the Selkirk and Rocky mountain ranges, along the line of the Canadian Pacific railway.

Specimen of the yellow-haired porcupine (*Erethizon dorsatus* var. *epixanthus*), from Corbyns' trail on the Illecillewaet.

N. J. Giroux :—

About 500 specimens of fossils from the Cambro-Silurian rocks at numerous localities in the counties of Joliette, Berthier and Maskinongé, in the province of Quebec.

D. B. Dowling :—

About 500 specimens of fossils from the Cambro-Silurian and Silurian rocks of the west shore of Lake Winnipeg and islands adjacent thereto.

A few Indian implements and small pieces of pottery from the mouth of the Little Saskatchewan river, Manitoba.

J. McEvoy :—

Ten fossils from the Carboniferous limestone of White valley, Okanagan valley, B.C.

James Macoun :—

Twenty-five specimens of fossil plants from Hastings, near Vancouver, B.C.

The additions to the palæontological, ethnological and zoological collections in the museum, by presentation, exchange or purchase, are as follows :—

By presentation :—

Horacé Belanger, chief factor Hudson's Bay Co., Norway House :—

Fine specimen each of the fisher (*Mustela Pennanti*) and cross fox (*Vulpes vulgaris* var. *decussatus*) from the Nelson river, Keewatin.

Patrick Neville (Deputy Inspector of Mines, N.S.), Bridgeport, C. B. :—

Thirty-three fine slabs of fossil plants from the Sydney coal field, and a lower jaw of a walrus from Cape Breton.

William Maddin (Deputy Inspector of Mines, N. S.), Westville, N. S. :—

Thirty specimens of fossil plants from the Springhill coal mines, N. S.

H. S. Poole, Stellarton, N. S. :—

Thirty specimens of fossil plants from the coal mines near Stellarton.

James Robertson, Albert Mines, Albert county, N. B. :—

Twenty-five specimens of two species of fishes (*Rhadinichthys*) from the Albert mines.

J. W. Tyrrell, C.E., Weston, Ont. :—

Eskimo mittens and boots of seal skin, the latter with waterproof feet; Eskimo boots, waterproof; Eskimo boots, harp-seal skin, with feet of the skin of the square-flipper seal; and Eskimo slippers; all from North Bluff, Hudson Strait.



- J. B. Tyrrell, Geol. Survey, Ottawa :—  
Cree-Stony Indian saddle from Wolf creek, Alberta.
- Hyacinthe Proulx, Ottawa :—  
Stone gouge found near the Rideau river, Carleton county, Ont.
- Frank Butler, Ottawa :—  
Hunter's knife and pipe-bowl from Alberta, used by Blood Indians of the Blackfeet tribe
- John F. Fenton, Huntley, Carleton county, Ont. :—  
Indian stone implement of singular and unusual shape, found by donor on his own farm, con. 3, lot 8, Huntley.
- Martin Griffin, jun., Ottawa :—  
Egg of wood peewee (*Contopus virens*).
- J. D. Moore, St. Mary's, Ont. :—  
Specimen of *Orthoceras* from the Corniferous limestone of St. Mary's.
- Prof. Henry M. Seely, Middleborough College, Middleborough, Vt.:—  
One species of fossil from the Cambrian, two from the Calciferous, and two from the Chazy of the states of Vermont and New York.
- Prof. F. Schmidt, St. Petersburg, Russia :—  
Nine species of fossils from the Cambrian and Silurian rocks of Estland and the Baltic.
- Alfred Ogden, House of Commons, Ottawa :—  
Twenty specimens of fossils from the Trenton limestone at Rochesterville, Ont
- By Purchase :  
From J. Stewart, Ottawa :—  
Thirty-three rare or unusually perfect specimens of fossils from the Trenton limestone, near Ottawa.
- Rev. G. W. Taylor, Victoria, V.I. :—  
Specimen of an undescribed decapod crustacean from the Cretaceous rocks of Vancouver island.

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BOTANY, &c.

In the last summary report on the work of this division it is stated that Professor Macoun was occupied on Part VI of the Catalogue of Canadian Plants, and on the Catalogue of Canadian Birds. Part VI has been completed, more than one-third of it has been printed, and the completed Catalogue of Canadian Birds will be ready for the printer before the end of the present month.

As these works are the result of the observation and collections of more than thirty years, it is hoped they will be well received, and prove useful to botanists and ornithologists throughout the world.

On the further work of this division during the year, Professor Macoun reports :—

"In compliance with your suggestion, that I should undertake the preparation of a Catalogue of Canadian fungi, with special reference to the edible and to the poisonous species, I have been working at it at intervals during the past six years. I now know nearly 800 species of Canadian Fungi, and during the coming summer hope to be able to gather enough material to enable me to write up the whole subject next winter.

"The agarics, which include most of the edible and poisonous fungi, change so rapidly after being gathered that drawings must be made from the fresh plant, and it is desirable that some arrangement be made to get this doné during next spring and summer. During the month of September last large collections were made in the vicinity of Ottawa of these species, and Mr. Lambe made water-colour drawings of them in the evenings. He did the work remarkably well, and I would respectfully suggest that a small sum be placed in the estimates to remunerate him for this work in the past and for the prospective work of next spring and summer. I may say that unless an arrangement is made with some person in Ottawa to make the drawings, I can proceed no further with this desirable and useful work.

"Having completed the collection of material for the Catalogue of Birds, I am now gathering data for a Catalogue of Canadian fresh-water Fishes, and should like you to authorize me to prosecute that work as a supplement to my other work when in the field.

"Early last May you requested me to endeavour to complete the set of photographs of Canadian trees, and about the last of that month I went to the Niagara district where I knew there were many rare and well-grown specimens. I was not disappointed, and in the course of a little over two weeks forty very fine trees were selected, of which Mr. Topley took excellent photographs. My time being limited, I had to return to Ottawa before good specimens of all the western trees could be selected, as I had been requested by you to proceed to Banff in order to make a collection of specimens of the fauna and flora of the Rocky Mountain park and vicinity for the museum proposed to be established at Banff.

"About the 1st of May, I telegraphed to Victoria, to Mr. William Spreadbough, who had been with me two years in British Columbia, to come to Banff and commence making a collection of the birds and mammals. He reached Banff on the 7th of May and at once commenced work. He was very successful and had obtained 251 skins before I joined him.

"On the 20th of June I left Ottawa and reached Banff on the 25th, commencing work the same day. From that date to the 24th of August, I was continuously employed collecting and drying plants, and in making notes on the flora and fauna of the park. These notes have been put into order since my return, so that should a report on the natural history of the park be at any time required it can be written in a very short time. During the two months I spent at Banff and in its vicinity I collected over 1,000 species of plants, and since my return have examined and arranged them all. Most of these have been mounted, labelled, and placed in a cabinet made for their reception.

"Early in May, at your request, I instructed the taxidermist to commence setting up birds for the Banff museum, and as far as I am aware he has been at that work ever since.

"The avi-fauna of the Rocky Mountain park will be found to consist of about 150 species, but it seems desirable that all the waders, swimming birds and grouse of the prairie region should be included in the collection, as nearly all travellers are sportsmen and they should be enabled to see for themselves the great variety of game birds that inhabit the Canadian prairies.

"A few small mammals and all the species of fishes known to be in the waters of the park were obtained. The skins of the larger fishes were brought to Ottawa, and numerous entire specimens of the small minnow that lives in the warm water of the sulphur springs. That it does live in the warm water is undoubted, but it also lives in cold water and there attains a larger size. We traced it from the warm springs through pools of water in the tufa mounds below them to the marshes on a level with the Bow river. We saw none in the river, but it may be there nevertheless. The chief peculiarity about this fish is its large pectoral fins—very large in proportion to its size.

"Knowing that the Catalogue of Canadian Birds would likely be printed this winter, I and Mr. Spreadbough went from Banff to Indian Head, a locality peculiarly well suited for collecting the birds of the prairie region. After three days I came on to Ottawa, while Mr. Spreadbough remained there collecting for four weeks. The result was 152 skins of birds and small mammals, and a list of all the birds found in September in that district.

"Since my return to Ottawa, I have been busy—when not engaged on either of the catalogues above mentioned, on the routine work connected with the Natural History branch. This work is greatly hampered by the very insufficient accommodation afforded for its prosecution. You are aware that for three years this has been obvious, and though the attention of the Department of Public Works has been called to it repeatedly, nothing has yet been done to remedy it.

"It was intended that Mr. Jas. M. Macoun should accompany me to Banff, but his appointment as secretary to Dr. G. M. Dawson, of the British Behring Sea Commis-



sioners, made a change in plans necessary. After my departure for Banff Mr. J. M. Macoun continued the work upon which he had been engaged since the opening of spring, viz., collecting plants in the vicinity of Ottawa, the flora of eastern Ontario being but poorly represented in our herbarium. On the 1st of July he was appointed secretary to Dr. G. M. Dawson, Behring Sea Commissioner for Canada, and since that date he has done no work for this branch excepting after office hours. While in Behring sea he collected plants whenever an opportunity was afforded and brought back with him the most valuable collection of arctic and sub-arctic plants that has yet been received into our herbarium. Many new species have already been described and others have not yet been determined.

"Since his return to Ottawa on the 20th of October, his duties in connection with the commission have occupied him during the regular office hours. In the evenings and at other times he has continued the usual routine work in the Natural History branch, and has been completing the collection of plants intended for the Banff museum; in a few weeks all work in connection with it will be finished. He has been, besides, engaged in examining and naming the various collections of flowering plants that were made during the summer, or that have been received from other collectors, and getting out the specimens to mount. Since the 20th of October, 1,711 sheets of specimens have been labelled and mounted.

"All work, except the mounting of specimens, in connection with the herbarium has, as in former years, been done by Mr. J. M. Macoun. During 1891, 5,378 sheets of specimens were mounted and placed in the herbarium, many more than during any previous year. Of these 4,490 are flowering plants and 888 are cryptogams. Of the flowering plants 1,943 are Canadian, 2,142 are European and 405 are from the United States.

"4,526 sheets of specimens were sent to public institutions and to private individuals in exchange for desiderata. Of these 1,391 are cryptogams and 3,135 are flowering plants. Of the above total 1,823 specimens were presented to the following American and European institutions:—

British Museum.....	212
Central Experimental Farm.....	172
Department of Public Instruction, Quebec.....	55
McGill University.....	100
National Museum, Washington.....	428
Harvard University.....	112
Shaw School of Botany, St. Louis.....	200
Columbia College.....	221
Michigan Agricultural College.....	183
Department of Agriculture, Washington.....	140

"Among the more valuable collections of plants received for the herbarium during the year may be mentioned those sent by J. A. Morten, Wingham, Ont., Jas. White, Edmonton, Ont., and Wm. Scott, Ottawa, and about 1,000 species presented to the herbarium by W. Bicknell, Bordighera, Italy. The latter is a remarkably fine and valuable collection, for which the special thanks of this Survey are due to Mr. Bicknell.

"Since the 31st of December, 1891, in connection with the work of this division, 429 letters of sufficient importance to copy were written and about the same number received."

#### MAPS.

##### *Maps in course of Preparation and Published during 1891.*

North-West Territory, 9 sheets, 20 to 26 inches long, by 16 inches broad, showing waters followed by the members of the Yukon Expedition, 1887-88, and reaching from longitude 111° to 144°, and latitude 59° to 68°, to accompany report by Mr. McConnell, published 1891. 8 miles=1 inch.  
 Index map of the above do do ..... 48 miles=1 inch.



North-West Territory, Athabaska and part of British Columbia, to illustrate work of Mr. McConnell, 1889-90, and reaching from longitude 110° to 120° and latitude 54° to 60°, in draughtsman's hands.....	8 miles=1 inch.	
British Columbia, Kamloops sheet (Dr. Dawson) ready for publication.....	4 miles=1 inch.	sq. m. 6,400
British Columbia, Shuswap sheet (Dr. Dawson) in progress.	do	6,400
British Columbia, Placer Mines of Cunningham Creek (Mr. Bowman).....	About 27½ chs=1 in.	34
British Columbia, Quartz veins and Placer Diggings, Grouse Creek (Mr. Bowman).....	do 25 chs=1 in.	14
British Columbia, Placer Mines of Antler Creek (Mr. Bowman).....	do 26 chs=1 in.	38
British Columbia, Plan of Lightning Creek (Mr. Bowman).....	400 ft.=1 in.	17
British Columbia, Plan of Williams' Creek (Mr. Bowman).....	About 10 chs=1 in.	12

The above (five) mining plans are in hands, and will shortly be ready for publication.

Manitoba; Map showing the whole of Lake Winnipeg (Mr. Tyrrell) in progress.....	4 miles=1 inch.	48,600
Northern Manitoba (part of) in progress (Mr. Tyrrell)....	2 miles=1 inch.	5,000
do (Mr. Tyrrell) ready for publication...	8 miles=1 inch.	20,000
Western Ontario, Lake of the Woods, sheet No. 2, ready for publication.....	2 miles=1 inch.	2,000
Western Ontario (Hunter's Island sheet) sheet No. 7 (Dr. Lawson) ready for publication.....	4 miles=1 inch.	3,456
Western Ontario, (north of Hunter's Island) sheet No. 6 (Mr. Smith) in progress.....	do	3,456
Western Ontario, sheet No. 9 (Mr. McInnes) in progress.	do	3,456
Ontario, sheet No. 130, Sudbury mining district (Dr. Bell) published with part F, Annual Report, vol. V., 1890-91.	do	3,456
Ontario, sheet No. 125, south of Sudbury sheet, in progress	do (about)	1,800
do do No. 115, ready for draughtsman.....	do	3,456
do General map in progress.....	do	
Quebec, N.E. ¼ sheet (Eastern Townships map) ready for publication.	do	4,500
do S.W. do in progress.	do	4,500
do N.W. do do	do	4,500
do and Lake St. John district, 2¼ sheets in progress (Mr. Low).....	do	6,912
Quebec, ¼ sheet, 18 S. E (Messrs. Bailey & McInnes), ready for engraver.....		3,456
Quebec, ¼ sheet, 18 N. E. (Messrs. Bailey & McInnes), in progress.....	do (about)	500
Quebec, Lièvre River and Templeton phosphate region, Ottawa county, 2 sheets (Mr. Ingall); sheet No. 2 engraved; sheet No. 1 ready for engraver.....	40 chns=1 inch.	220
New Brunswick, surface geology, ¼ sheets, 1 S.W., 1 S.E., and 1 N.E., 3 sheets (Mr. Chalmers), ready for publication.....	4 miles=1 inch.	6,650
Nova Scotia, ¼ sheet, 11 N.W. in the engraver's hands....	do	
do ¼ sheet, 11 S.W. (Messrs. Fletcher & Faribault), published 1891.....	do (about)	650
Nova Scotia, ¼ sheets, 4 N.E. and 4 S.E. (Messrs. Fletcher & Faribault), in progress.....	1 inch=1 mile.	

## LIBRARY—SALES AND DISTRIBUTION OF PUBLICATIONS.

The librarian, Dr. Thorburn, reports that during the year, from the 2nd of January to the 31st of December, there have been distributed 8,593 publications of the Geological Survey Department, comprising annual reports, parts of these, special reports and maps. Of these, 5,918 were distributed in Canada; the remainder, 2,675, were sent to foreign countries as exchanges to scientific and literary institutions, and to a number of individuals engaged in scientific pursuits. In most cases, the institutions and individuals receiving the survey publications reciprocate by supplying the library with copies of their publications, or otherwise rendering important assistance in the work of the survey.

It may be stated that the general list of exchanges now amounts to 782, and, besides these, there are upwards of 1,000 others receiving reports on palæontology, mineral statistics and botany. Due care has to be exercised in the distribution of the publications. Were all the applications granted, the supply, which is limited, would soon be exhausted. It is deemed advisable to retain a sufficient number in stock with which to supply future requirements. A large number of the earlier reports are already out of print, and can no longer be supplied.

The number of books, pamphlets and maps presented to the library last year was 2,307. Besides these, 146 books were purchased, and 38 periodicals, on geological, mineralogical and natural history subjects, were subscribed for.

The number of books bound in 1891 was 256.

The letters and acknowledgments sent to the library for publications distributed during the year were 1,952, and the number of letters sent out by the librarian was 1,053.

There are now about 9,000 volumes and 3,600 pamphlets in the library.

Attention is again called to the altogether insufficient space available for library purposes. The cases are all filled, and a large portion of the books are piled up round the library floor and in other parts of the building, and consequently, in many cases, it is difficult to find works which are required for consultation by members of the staff.

Sales of survey publications for the year ending 31st December, 1891, amounted to \$3,550.03.

## VISITORS.

The number of visitors to the museum during the year was 20,363, being an increase of 2,063 over 1890, and of 10,814 since 1882, the first year of the opening of the museum in Ottawa.

## STAFF, APPROPRIATION, EXPENDITURE AND CORRESPONDENCE.

The strength of the staff at present employed is 56, viz., professional, 37; ordinary, 19.

During the calendar year the following changes in the permanent staff have taken place:—

Mr. W. F. Ferrier, appointed lithologist.

Mr. N. J. Giroux do assistant geologist.

Mr. A. E. Barlow do do

Mr. S. Barlow, chief geographer, promoted to the rank of chief clerk.

Mr. H. P. Brumell, promoted from the third to the second class.

The amount available for the fiscal year ended 30th June, 1891, was :—

	Grant.	Expenditure.
	\$ cts.	\$ cts.
Civil list appropriation .....	47,330 00	
Geological Survey and Museum appropriation .....	60,100 00	
Artesian boring appropriation .....	10,000 00	
Civil list salaries .....		41,792 50
Wages of temporary employes .....		19,001 16
Exploration and survey .....		27,473 81
Boring operations, Deloraine, Man .....		6,514 48
Printing and lithography .....		9,605 39
Stationery, mapping materials and Queen's Printer .....		1,823 55
Purchase of specimens .....		309 40
Purchase of books and instruments .....		545 30
Purchase of laboratory apparatus and chemicals .....		508 05
Incidental and other expenses .....		1,805 72
Less—Paid in 1890 .....		109,379 36
		6,534 66
ADD—Advances to field explorers .....		102,844 70
Unexpended balance, civil list appropriation .....		5,159 75
do general do .....		5,537 50
		3,888 05
	117,430 00	117,430 00

The correspondence of the department shows a total of 10,852 letters sent, and 6,947 received.

I have the honour to be, Sir,

Your most obedient servant,

ALFRED R. C. SELWYN,

*Deputy Head and Director.*

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